

Plastics Interlaboratory Testing Program

Web Summary Report #130, 2nd Qtr 2024

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Analysis Analysis Name

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About CTS and the Plastics Interlaboratory Program

Founded in 1971, Collaborative Testing Services, Inc. (CTS) is a privately-owned company that specializes in interlaboratory tests for a wide variety of industries including rubber, plastics, fasteners and metals, containerboard, paper, color, agriculture, hemp, and wine, as well as proficiency tests for forensic laboratories. All of the tests are designed to assist organizations in achieving and maintaining quality control objectives. Labs from the U.S., as well as more than 100 countries currently participate in CTS programs.

Collaborative Testing Services initiated the Collaborative Reference Program for PLASTICS in 1992 at the request of industry, ASTM committee D-20 members, and accrediting bodies. Additional test methods are always under review and are incorporated into the program when possible.

The program allows laboratories to compare periodically the level and uniformity of their testing with that of other participating laboratories. It also provides a realistic assessment of the state of plastics testing proficiency.

For each test there is a summary of the statistics for the analysis and a graphical representation of the data. Also shown are notes concerning specific laboratory results, as well as significant findings related to instrument types or other testing variations. Refer to the KEY FOR SUMMARY REPORT for an explanation of terms and guidelines for interpreting the results.

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Key for Web Summary Report (Page 1 of 2)

WebCode	Assigned laboratory identification number (temporary) used to ensure lab confidentiality while permitting a lab to locate its data in the Plastics Web Summary Report published on the CTS web site. The WebCode for each analysis can be found in the Performance Analysis Report mailed to each participant.
Lab Mean	The average of the test results obtained by the participant.
Grand Mean	The average of the LAB MEANS for all included participants. Laboratories flagged with an X or an M (see DATA FLAG column) are excluded from the GRAND MEAN.
Difference from Grand Mean	The difference of the LAB MEAN from the GRAND MEAN.
Between-Lab Standard Deviation	An indication of the precision of measurement between the laboratories. The greater the spread of the LAB MEANS about the GRAND MEAN, the larger the BETWEEN-LAB STANDARD DEVIATION (and vice versa).
Comparative Performance Value	An indication of how well a laboratory's results agree with the other participants. The CPV is a ratio indicating the number of standard deviations from the GRAND MEAN. The closer a laboratory's COMPARATIVE PERFORMANCE VALUE is to zero, the more consistent its results are with the other participants' data (and vice versa). The critical value for each CPV will vary depending on the number of labs participating in a test.
Inst Code	A code indicating the manufacturer of the instrument used to perform the test (see separate INSTRUMENT CODE LIST for each test section) if instruments are tracked.
Data Flag	DATA FLAGS are assigned based on the simultaneous analysis of both samples tested. Refer to the following chart for an explanation of each symbol:

<u>DATA FLAG</u>	<u>STATISTICALLY INCLUDED/EXCLUDED</u>	<u>ACTION REQUIRED</u>
*	INCLUDED	CAUTION - review testing procedure and monitor future results. Results fall outside 95% ellipse but within a 99% ellipse that is calculated but not drawn.
X	EXCLUDED	STOP - immediate review of data and/or testing procedure is required. Results fall outside the 99% ellipse. See specific notes following each table for more information on why the data is excluded.
M	EXCLUDED	PROCEED - lab was unable to report data for at least one sample.

Graph - For each laboratory, the LAB MEAN for the first sample (x-axis) is plotted against the LAB MEAN for the second sample (y-axis) with each point representing a laboratory. The horizontal and vertical cross-hairs are the GRAND MEANS for each sample. When 20 or more laboratories are in the statistics, an ellipse is also drawn so that 95% of the time a randomly selected laboratory will be included inside the ellipse. Plotted data flags are explained above.

Common Problems Highlighted in Footnotes

1. ***Extreme data*** - The laboratory's results for one or both samples are so inconsistent with those of the other participants that the lab mean(s) fall outside the plot. The participant is advised to immediately review his data and/or testing procedure.
 2. ***Systematic bias*** - The laboratory's results are either consistently high or low for both samples when compared to the other participants (the plotted point falls near the top or bottom of the ellipse). This indicates that the participant is performing the test with a constant bias. Causes of systematic errors include improper calibration, the particular make/model of equipment or a modification to the testing procedure.
 3. ***Inconsistency in testing between samples/sample sets*** - The laboratory's results indicate that there are differences in the way the two samples tested (the plotted point falls to the side of the ellipse). This type of error may be attributed to the analyst deviating from the procedure when testing one of the samples or a material interaction occurrence with the instrument or room conditions. The inconsistency is reflected in the CPVs for the two samples, such as a +1.5 CPV for sample A and a -2.2 CPV for sample B. CTS also will specify if the laboratory's data for one sample are high/low compared to the other participants. If this inconsistency is slight, the lab's plotted point will be an * that falls on the edge of the ellipse.
 4. ***Inconsistency in testing within a sample*** - The laboratory's within-lab standard deviation for a specified sample is high when compared to the other participants, often causing the lab's plotted point to fall outside of the ellipse.
-

Labs flagged with an * are not typically included in the footnotes of a data table. These labs may locate their position in the control ellipse and use the definitions above to help identify the type of testing error. An * should serve as a caution flag, a "yellow light", to a lab. If this error is repeated in future rounds, a lab may need to stop and review its testing procedures. The initial data flag is not cause for alarm. Interlaboratory tests conducted at regular intervals permit a lab to recognize trends in testing.



Plastics Interlaboratory Testing Program

Results Summary for Report #130, 2nd Qtr 2024

Analysis 704 - Tensile Stress at Yield

Material: HIPS	Sample F01	4,029.34	psi	2.85% COV
	Sample F02	4,037.69	psi	2.76% COV

Analysis 705 - Tensile Stress at Break

Material: HIPS	Sample F01	3,339.25	psi	3.73% COV
	Sample F02	3,339.10	psi	3.60% COV

Analysis 706 - Percent Elongation at Yield

Material: HIPS	Sample F01	1.3770	Percent	4.97% COV
	Sample F02	1.3818	Percent	5.25% COV

Analysis 708 - Modulus of Elasticity

Material: HIPS	Sample F01	336.07	ksi	7.55% COV
	Sample F02	336.19	ksi	7.70% COV

Analysis 710 - Deflection Temp. Under Flexural Load (1.82 MPa)

Material: HIPS	Sample E01	76.744	Degrees C	1.14% COV
	Sample E02	76.774	Degrees C	1.16% COV

Analysis 711 - Deflection Temp. Under Flexural Load (0.455 MPa)

Material: PP	Sample G01	115.93	Degrees C	11.8% COV
	Sample G02	115.31	Degrees C	10.3% COV

Analysis 712 - Temperature of Deflection (1.80 MPa)

Material: ABS	Sample N01	82.926	Degrees C	1.01% COV
	Sample N02	82.942	Degrees C	0.964% COV

Analysis 715 - Vicat Temperature (Rate A)

Material: HIPS	Sample H01	96.013	Degrees C	0.645% COV
	Sample H02	95.949	Degrees C	0.438% COV

Analysis 716 - Vicat Temperature (Rate B)

Material: HIPS	Sample R01	97.626	Degrees C	2.10% COV
	Sample R02	97.729	Degrees C	2.20% COV

Analysis 718 - Specific Gravity

Material: HIPS	Sample T01	1.0343	sp gr 23/23 C	0.262% COV
	Sample T02	1.0345	sp gr 23/23 C	0.245% COV

Analysis 720 - Flexural Modulus

Material: HIPS	Sample J01	345.87	ksi	6.45% COV
	Sample J02	345.42	ksi	6.61% COV

Analysis 721 - Flexural Stress at 5% Strain

Material: HIPS	Sample J01	6,338.25	psi	4.14% COV
	Sample J02	6,346.61	psi	4.36% COV

Analysis 722 - Flexural Stress at Yield

Material: HIPS	Sample J01	6,278.97	psi	6.89% COV
	Sample J02	6,278.50	psi	6.83% COV

Analysis 730 - Tensile Stress at Yield, ISO Method

Material: HIPS	Sample C01	26.457	MPa	2.56% COV
	Sample C02	26.420	MPa	2.45% COV

Analysis 731 - Tensile Stress at Break, ISO Method

Material: HIPS	Sample C01	21.277	MPa	3.58% COV
	Sample C02	21.174	MPa	3.49% COV



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Analysis 732 - Strain at Yield, ISO Method

Material: HIPS	Sample C01	1.3040	Percent	4.35% COV
	Sample C02	1.3034	Percent	4.59% COV

Analysis 734 - Modulus of Elasticity, ISO Method

Material: HIPS	Sample C01	2,282.69	MPa	4.05% COV
	Sample C02	2,284.29	MPa	4.25% COV

Analysis 736 - Flexural Modulus

Material: HIPS	Sample K01	2,308.90	MPa	5.14% COV
	Sample K02	2,320.43	MPa	4.95% COV

Analysis 737 - Flexural Stress at 3.5% Strain

Material: HIPS	Sample K01	41.558	MPa	3.61% COV
	Sample K02	41.784	MPa	3.40% COV

Analysis 738 - Flexural Stress at Yield

Material: HIPS	Sample K01	42.318	MPa	3.52% COV
	Sample K02	42.574	MPa	3.50% COV

Analysis 750 - Flow Rate (190C or 230C/2.16 kg)

Material: PP	Sample X01	12.461	grams/10 mins	5.19% COV
	Sample X02	12.624	grams/10 mins	5.89% COV

Analysis 755 - Moisture Content

Material: ABS	Sample Y01	0.12341	Percent	32.5% COV
	Sample Y02	0.12395	Percent	33.2% COV

Analysis 757 - Ash Content

Material: PBT	Sample L01	29.675	Percent	0.262% COV
	Sample L02	29.693	Percent	0.238% COV

Analysis 758 - TGA

Material: PP	Sample A01	79.195	Percent	0.566% COV
	Sample A02	79.248	Percent	0.341% COV

Analysis 760 - DSC Crystallization Temperature

Material: PBT	Sample W01	173.22	Degrees Celsius	2.75% COV
	Sample W02	173.21	Degrees Celsius	2.73% COV

Analysis 761 - DSC Melt Temperature

Material: PBT	Sample W01	223.64	Degrees Celsius	0.660% COV
	Sample W02	223.56	Degrees Celsius	0.670% COV

Analysis 762 - DSC Enthalpy of Crystallization

Material: PBT	Sample W01	46.346	Joules Per Gram	11.1% COV
	Sample W02	46.388	Joules Per Gram	10.7% COV

Analysis 763 - DSC Enthalpy of Fusion

Material: PBT	Sample W01	41.948	Joules Per Gram	16.3% COV
	Sample W02	42.379	Joules Per Gram	16.0% COV

Analysis 764 - DSC Glass Transition Temperature

Material: PET	Sample V01	82.250	Degrees Celsius	1.32% COV
	Sample V02	82.294	Degrees Celsius	1.33% COV

Analysis 765 - Research Crystallization Peak Temperature

Material: PBT	Sample W01	174.14	Degrees Celsius	1.40% COV
	Sample W02	172.18	Degrees Celsius	2.85% COV



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Analysis 766 - Research Melting Peak Temperature

Material: PBT	Sample W01	223.19	Degrees Celsius	0.828% COV
	Sample W02	223.22	Degrees Celsius	0.791% COV

Analysis 767 - Research Heat of Crystallization

Material: PBT	Sample W01	48.247	Joules Per Gram	14.2% COV
	Sample W02	48.101	Joules Per Gram	16.3% COV

Analysis 768 - Research Heat of Fusion

Material: PBT	Sample W01	45.000	Joules Per Gram	16.0% COV
	Sample W02	45.319	Joules Per Gram	16.2% COV

Analysis 769 - Research Glass Transition Temperature

Material: PET	Sample V01	80.938	Degrees Celsius	3.82% COV
	Sample V02	81.107	Degrees Celsius	3.83% COV

Analysis 770 - Tensile Stress at Yield, Films

Material: LDPE	Sample B01	1,673.81	psi	8.35% COV
	Sample B02	1,652.51	psi	10.2% COV

Analysis 771 - Tensile Stress at Break, Films

Material: LDPE	Sample B01	3,437.07	psi	13.5% COV
	Sample B02	3,434.94	psi	12.7% COV

Analysis 772 - Elongation at Yield, Films

Material: LDPE	Sample B01	35.171	Percent	41.1% COV
	Sample B02	35.027	Percent	43.5% COV

Analysis 773 - Elongation at Break, Films

Material: LDPE	Sample B01	813.66	Percent	20.2% COV
	Sample B02	805.74	Percent	23.7% COV

Analysis 774 - Thickness of Film Specimens

Material: LDPE	Sample B01	2.9720	mils	7.19% COV
	Sample B02	2.9184	mils	7.34% COV

Analysis 775 - Secant Modulus at 1% Strain

Material: LDPE	Sample B01	30,891.02	psi	15.6% COV
	Sample B02	31,749.75	psi	14.1% COV

Analysis 776 - Secant Modulus at 2% Strain

Material: LDPE	Sample B01	25,746.68	psi	20.1% COV
	Sample B02	26,479.58	psi	20.2% COV

Analysis 780 - Static Friction

Material: LDPE	Sample P01	0.14559	COF	52.6% COV
	Sample P02	0.14641	COF	42.3% COV

Analysis 781 - Kinetic Friction

Material: LDPE	Sample P01	0.09472	COF	60.1% COV
	Sample P02	0.09090	COF	54.8% COV

Analysis 782 - Tear Resistance of Film

Material: LDPE	Sample Q01	287.52	grams-force	21.8% COV
	Sample Q02	297.44	grams-force	22.1% COV

Analysis 785 - Percent Haze

Material: LDPE	Sample D01	18.938	Percent	4.17% COV
	Sample D02	19.101	Percent	4.89% COV



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Analysis 786 - Total Transmittance

Material: LDPE	Sample D01	92.591	Percent	1.29% COV
	Sample D02	92.571	Percent	1.26% COV

Analysis 790 - Notched Izod Impact

Material: ABS	Sample S01	3.7190	ft.lbf/in	9.30% COV
	Sample S02	3.7345	ft.lbf/in	9.32% COV

Analysis 791 - Notched Izod Impact

Material: ABS/PC	Sample Z01	44.325	kJ/m^2	7.29% COV
	Sample Z02	44.339	kJ/m^2	6.64% COV

Analysis 792 - Notched Charpy Impact

Material: HIPS	Sample M01	8.5366	kJ/m^2	4.32% COV
	Sample M02	8.4957	kJ/m^2	4.75% COV



Plastics Interlaboratory Testing Program

Analysis 704

Report #130

2nd Qtr 2024

Tensile Stress at Yield - psi

WebCode	Data Flag	Sample F01			Sample F02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
24MPR3		4,092.0	62.7	0.55	4,082.0	44.3	0.40
36E6FJ		4,237.4	208.1	1.81	4,266.2	228.5	2.05
3RP9DL	*	3,848.0	-181.3	-1.58	3,968.0	-69.7	-0.63
4D9J6B	X	3,375.6	-653.7	-5.70	3,401.8	-635.9	-5.71
6BCGNL		3,858.7	-170.6	-1.49	3,818.0	-219.7	-1.97
6YLKMN		3,866.1	-163.2	-1.42	3,824.2	-213.5	-1.92
7C6PAB		4,070.0	40.7	0.35	4,060.0	22.3	0.20
823Q22		3,944.0	-85.3	-0.74	3,974.0	-63.7	-0.57
8E7C26	*	4,300.8	271.5	2.37	4,200.4	162.7	1.46
8WLJD2	X	3,632.0	-397.3	-3.46	3,602.0	-435.7	-3.91
9CZXJ7		3,878.0	-151.3	-1.32	3,962.0	-75.7	-0.68
9EKYDR		4,046.2	16.9	0.15	4,044.4	6.7	0.06
A8U6CC		4,157.8	128.4	1.12	4,190.6	152.9	1.37
ALFKFC		4,100.2	70.9	0.62	4,150.4	112.7	1.01
BD3LUD		4,053.3	23.9	0.21	4,085.7	48.1	0.43
BF9ZH8		4,019.0	-10.3	-0.09	4,051.6	13.9	0.13
BHAEFW		3,960.4	-68.9	-0.60	3,956.6	-81.1	-0.73
BMRC9T		4,044.0	14.7	0.13	4,012.8	-24.9	-0.22
CWAFTX	*	3,899.8	-129.5	-1.13	4,052.7	15.0	0.13
DJJ4UT		4,030.0	0.7	0.01	3,995.8	-41.9	-0.38
E4NUYZ		4,019.2	-10.1	-0.09	3,983.6	-54.1	-0.49
FCV3PZ		4,138.0	108.7	0.95	4,121.8	84.1	0.76
FXQUT4		4,061.1	31.8	0.28	4,061.1	23.4	0.21
GJ8GAG		3,970.1	-59.2	-0.52	4,009.2	-28.4	-0.26
GTDH8M	X	3,793.4	-235.9	-2.06	4,035.2	-2.5	-0.02
GWDT22		4,044.0	14.7	0.13	4,048.0	10.3	0.09
HZQTXT		4,176.8	147.5	1.29	4,194.8	157.1	1.41
JL44EG		3,995.0	-34.3	-0.30	4,045.6	7.9	0.07
KRBUGM		4,228.8	199.5	1.74	4,224.2	186.5	1.68
KTGCFH		3,955.6	-73.7	-0.64	3,972.0	-65.7	-0.59
M2A7QL		3,946.0	-83.3	-0.73	3,940.2	-97.5	-0.88
NAVR84		4,039.3	10.0	0.09	4,019.0	-18.7	-0.17
NDV334		4,052.4	23.1	0.20	4,083.7	46.0	0.41
NG44FN		3,959.1	-70.3	-0.61	3,984.7	-53.0	-0.48
NGX2DW		4,106.0	76.7	0.67	4,180.2	142.5	1.28



Plastics Interlaboratory Testing Program

Analysis 704

Report #130

2nd Qtr 2024

Tensile Stress at Yield - psi

WebCode	Data Flag	Sample F01			Sample F02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NHBBQ3		4,008.8	-20.6	-0.18	4,024.3	-13.4	-0.12
NJM6BA		3,842.0	-187.3	-1.63	3,872.0	-165.7	-1.49
P3UTHZ		3,899.6	-129.7	-1.13	3,960.4	-77.3	-0.69
P6H7ZH		3,934.0	-95.3	-0.83	3,884.0	-153.7	-1.38
P7QL8N		3,944.0	-85.3	-0.74	4,008.0	-29.7	-0.27
PUF9R9		4,164.5	135.1	1.18	4,188.4	150.8	1.35
PYTTYU		4,011.8	-17.6	-0.15	4,043.7	6.0	0.05
REYWBY		4,001.9	-27.4	-0.24	4,021.2	-16.5	-0.15
T4WY3P		4,096.4	67.1	0.58	4,074.0	36.3	0.33
T6NURJ		3,919.0	-110.4	-0.96	3,948.0	-89.7	-0.81
TMLARB		3,961.4	-67.9	-0.59	4,011.6	-26.1	-0.23
TQTJ8M		3,842.7	-186.6	-1.63	3,855.0	-182.6	-1.64
U3X8AF		3,870.4	-158.9	-1.39	3,821.6	-216.1	-1.94
UGZGDP		3,949.2	-80.1	-0.70	3,882.4	-155.3	-1.40
W38WND		4,003.4	-25.9	-0.23	3,955.0	-82.7	-0.74
WFGCW3		3,924.6	-104.7	-0.91	3,909.6	-128.1	-1.15
WY8NJ3		4,137.4	108.1	0.94	4,175.2	137.5	1.24
X3PZ4Q		4,191.2	161.9	1.41	4,181.6	143.9	1.29
XE2DBT		4,018.0	-11.3	-0.10	3,958.0	-79.7	-0.72
Y4QPEX	*	4,334.0	304.7	2.66	4,270.0	232.3	2.09
YD3KZR		4,048.8	19.5	0.17	4,006.0	-31.7	-0.28
YF7KTC		4,055.6	26.3	0.23	4,061.0	23.3	0.21
YTDBVJ		4,124.9	95.6	0.83	4,116.2	78.5	0.71
Z96D2F		4,072.0	42.7	0.37	4,114.0	76.3	0.69
ZCYLUN		4,044.2	14.9	0.13	4,091.2	53.5	0.48
ZPQBR9		4,204.8	175.5	1.53	4,189.8	152.1	1.37

Summary Statistics

Sample F01

Sample F02

Grand Means

4,029.34 psi

4,037.69 psi

Stnd Dev Btwn Labs

114.72 psi

111.29 psi

Statistics based on 58 of 61 reporting participants

Sample F01: HIPS & Sample F02: HIPS



Plastics Interlaboratory Testing Program
Analysis 704
Tensile Stress at Yield - psi

Report #130
2nd Qtr 2024

Comments on Assigned Data Flags for Test #704

- 4D9J6B (X) - Data for both samples are low. Possible Systematic Error.
- 8WLJD2 (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample F01.
- GTDH8M (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample F02.



Plastics Interlaboratory Testing Program

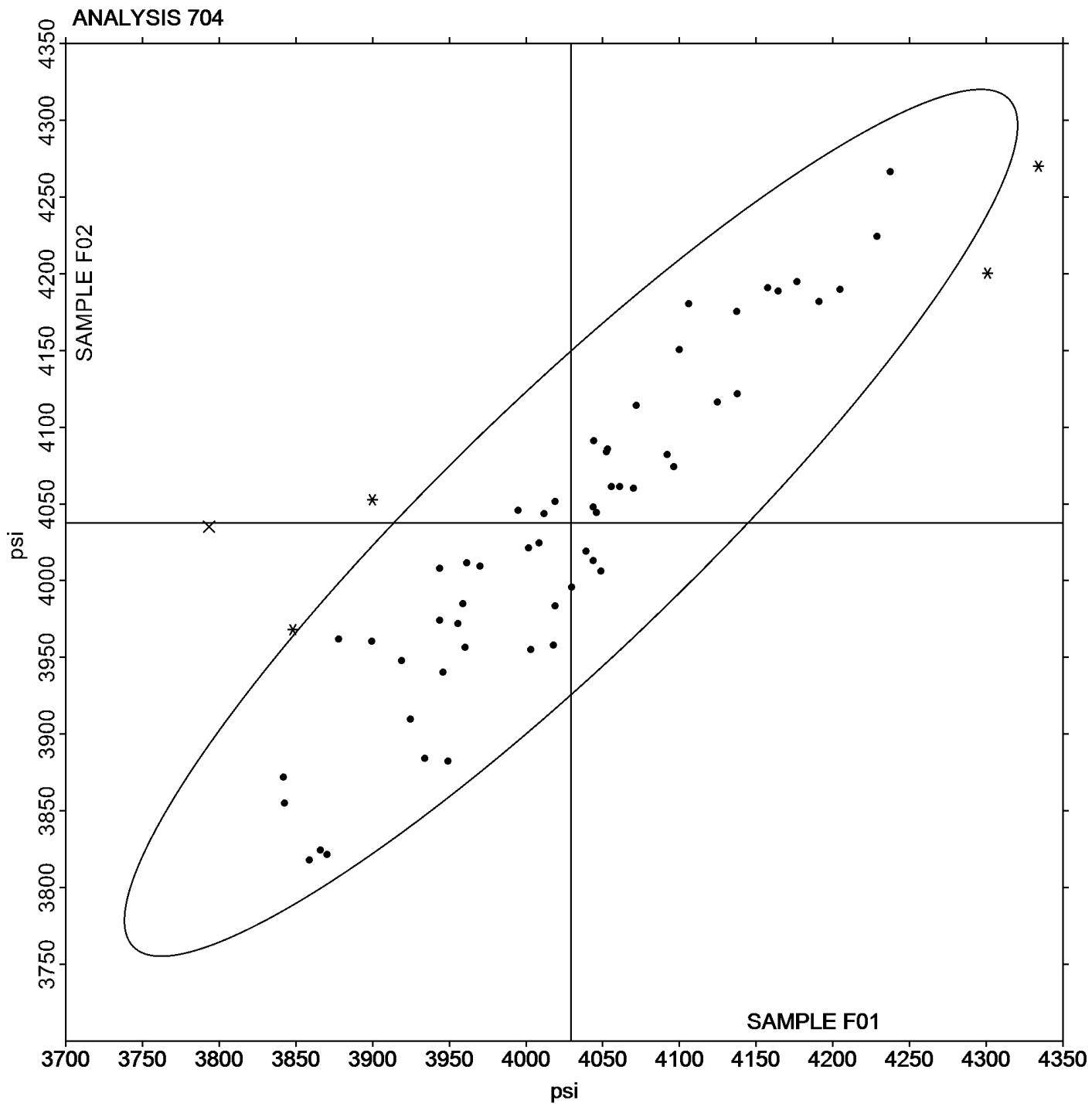
Analysis 704

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Tensile Stress at Yield - psi

Grand Mean Sample F01: 4,029.34 psi Grand Mean Sample F02: 4,037.69 psi





Plastics Interlaboratory Testing Program

Analysis 705

Report #130

2nd Qtr 2024

Tensile Stress at Break - psi

WebCode	Data Flag	Sample F01			Sample F02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
24MPR3		3,432.8	93.6	0.75	3,338.0	-1.1	-0.01
36E6FJ		3,438.6	99.4	0.80	3,482.4	143.3	1.19
4D9J6B	*	2,975.0	-364.2	-2.92	3,053.0	-286.1	-2.38
6BCGNL		3,210.9	-128.4	-1.03	3,169.9	-169.2	-1.41
6YLKMN		3,269.2	-70.1	-0.56	3,202.4	-136.7	-1.14
7C6PAB		3,337.4	-1.8	-0.01	3,310.8	-28.3	-0.24
823Q22		3,338.0	-1.2	-0.01	3,318.0	-21.1	-0.18
8E7C26	*	3,659.0	319.8	2.56	3,529.2	190.1	1.58
8WLJD2		3,070.0	-269.2	-2.16	3,062.0	-277.1	-2.30
9EKYDR		3,230.0	-109.2	-0.88	3,124.2	-214.9	-1.79
ALFKFC		3,474.8	135.6	1.09	3,529.8	190.7	1.58
BD3LUD		3,404.1	64.8	0.52	3,425.5	86.4	0.72
BF9ZH8		3,348.6	9.4	0.08	3,443.8	104.7	0.87
BHAEFW		3,216.6	-122.6	-0.98	3,179.2	-159.9	-1.33
BMRC9T		3,394.8	55.6	0.45	3,392.4	53.3	0.44
CWAFTX		3,235.4	-103.8	-0.83	3,364.8	25.7	0.21
DJJ4UT		3,320.6	-18.6	-0.15	3,219.8	-119.3	-0.99
E4NUYZ		3,344.0	4.8	0.04	3,295.8	-43.3	-0.36
FCV3PZ		3,404.0	64.8	0.52	3,309.8	-29.3	-0.24
FXQUT4		3,393.9	54.7	0.44	3,335.9	-3.2	-0.03
GJ8GAG		3,184.3	-154.9	-1.24	3,226.5	-112.6	-0.94
GTDH8M		3,441.8	102.6	0.82	3,424.0	84.9	0.71
HZQXTXT		3,436.4	97.2	0.78	3,409.6	70.5	0.59
JL44EG		3,367.2	28.0	0.22	3,350.4	11.3	0.09
KRBUGM		3,500.8	161.6	1.30	3,499.4	160.3	1.33
KTGCFH		3,422.8	83.6	0.67	3,316.2	-22.9	-0.19
M2A7QL		3,314.0	-25.2	-0.20	3,314.4	-24.7	-0.21
NAVR84		3,339.4	0.1	0.00	3,338.8	-0.3	0.00
NDV334		3,359.7	20.4	0.16	3,407.3	68.2	0.57
NG44FN		3,255.3	-83.9	-0.67	3,269.1	-70.0	-0.58
NHBBQ3		3,401.3	62.1	0.50	3,289.1	-50.0	-0.42
NJM6BA		3,242.0	-97.2	-0.78	3,240.0	-99.1	-0.82
P3UTHZ		3,217.4	-121.8	-0.98	3,235.8	-103.3	-0.86
P7QL8N		3,338.0	-1.2	-0.01	3,346.0	6.9	0.06
PUF9R9		3,453.3	114.1	0.91	3,488.0	148.9	1.24



Plastics Interlaboratory Testing Program

Analysis 705

Report #130

2nd Qtr 2024

Tensile Stress at Break - psi

WebCode	Data Flag	Sample F01			Sample F02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
PYTTYU		3,393.9	54.7	0.44	3,486.7	147.6	1.23
REYWBY		3,320.4	-18.8	-0.15	3,297.0	-42.1	-0.35
T6NURJ		3,182.2	-157.1	-1.26	3,257.6	-81.5	-0.68
TMLARB		3,206.2	-133.0	-1.07	3,289.0	-50.1	-0.42
TQTJ8M		3,221.3	-118.0	-0.95	3,349.1	10.0	0.08
U3X8AF		3,255.8	-83.4	-0.67	3,239.8	-99.3	-0.83
W38WND	X	4,082.8	743.6	5.96	4,040.8	701.7	5.83
WFGCW3		3,250.0	-89.2	-0.72	3,314.8	-24.3	-0.20
WY8NJ3		3,437.8	98.6	0.79	3,494.2	155.1	1.29
X3PZ4Q		3,600.0	260.8	2.09	3,600.4	261.3	2.17
XE2DBT		3,330.0	-9.2	-0.07	3,256.0	-83.1	-0.69
Y4QPEX		3,599.2	260.0	2.09	3,544.2	205.1	1.70
YD3KZR		3,353.6	14.4	0.12	3,322.4	-16.7	-0.14
YF7KTC		3,327.8	-11.4	-0.09	3,388.0	48.9	0.41
YTDBVJ		3,431.6	92.4	0.74	3,408.4	69.3	0.58
Z96D2F		3,334.0	-5.2	-0.04	3,460.0	120.9	1.00
ZCYLUN		3,286.4	-52.8	-0.42	3,345.4	6.3	0.05

Summary Statistics

Sample F01

Sample F02

Grand Means

3,339.25 psi

3,339.10 psi

Stnd Dev Btwn Labs

124.68 psi

120.35 psi

Statistics based on 51 of 52 reporting participants

Sample F01: HIPS & Sample F02: HIPS

Comments on Assigned Data Flags for Test #705

W38WND (X) - Data for both samples are high. Possible Systematic Error.



Plastics Interlaboratory Testing Program

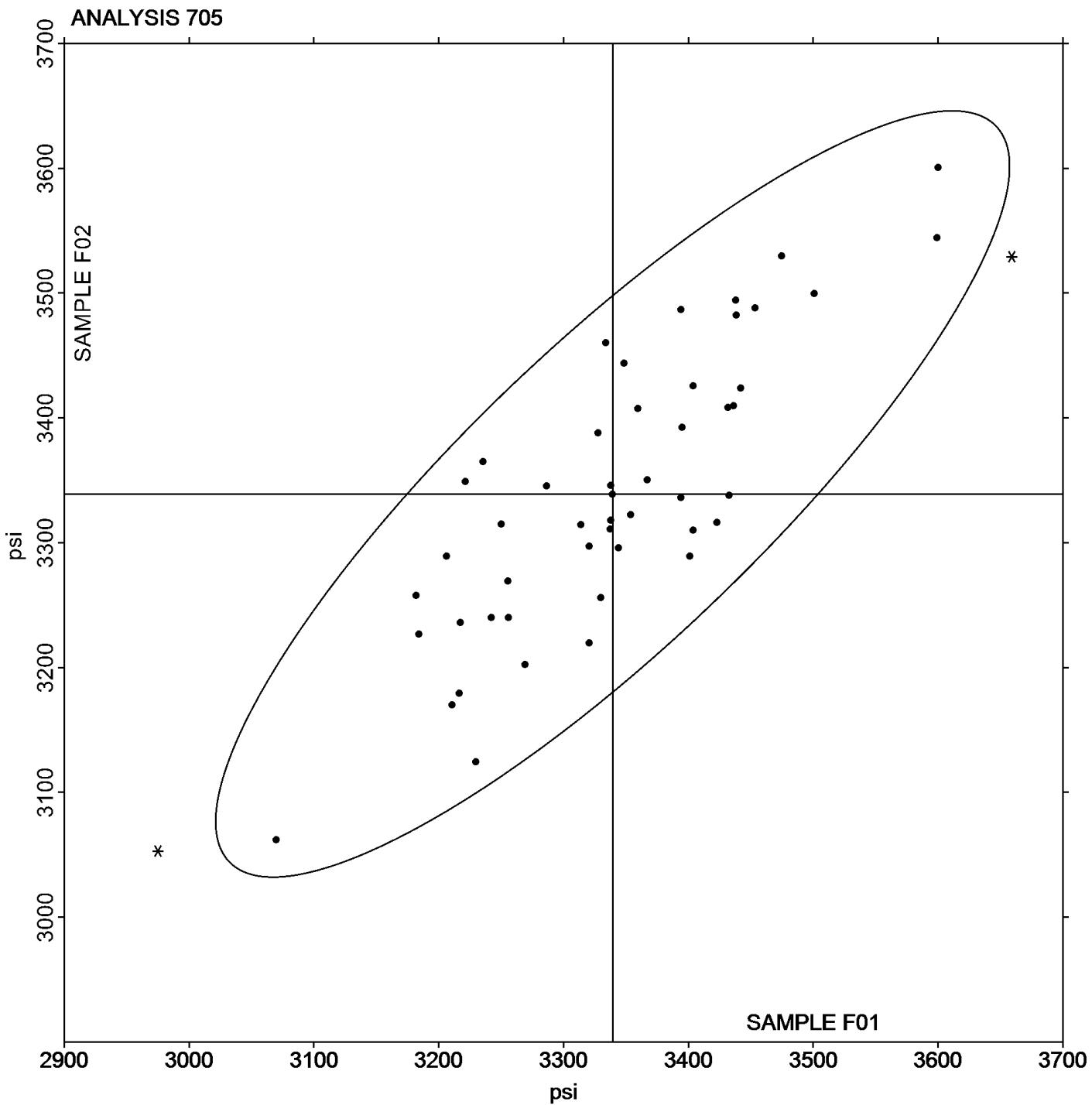
Analysis 705

Report #130

2nd Qtr 2024

Tensile Stress at Break - psi

Grand Mean Sample F01: 3,339.25 psi Grand Mean Sample F02: 3,339.10 psi





Plastics Interlaboratory Testing Program

Analysis 706

Report #130

2nd Qtr 2024

Percent Elongation at Yield - Percent

WebCode	Data Flag	Sample F01			Sample F02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
24MPR3	X	2.032	0.655	9.57	2.020	0.638	8.80
4D9J6B	X	0.990	-0.387	-5.65	1.104	-0.278	-3.83
6BCGNL	*	1.230	-0.147	-2.15	1.194	-0.188	-2.59
7C6PAB		1.478	0.101	1.48	1.500	0.118	1.63
823Q22	X	1.620	0.243	3.55	1.680	0.298	4.11
8E7C26	X	1.542	0.165	2.41	1.426	0.044	0.61
8WLJD2		1.306	-0.071	-1.04	1.312	-0.070	-0.96
9EKYDR		1.339	-0.038	-0.55	1.350	-0.032	-0.44
A8U6CC		1.392	0.015	0.22	1.404	0.022	0.31
ALFKFC		1.330	-0.047	-0.69	1.400	0.018	0.25
BD3LUD		1.410	0.033	0.48	1.394	0.012	0.17
BF9ZH8		1.314	-0.063	-0.92	1.310	-0.072	-0.99
BHAEFW	*	1.580	0.203	2.97	1.616	0.234	3.23
BMRC9T	*	1.460	0.083	1.21	1.400	0.018	0.25
CWAFTX		1.392	0.015	0.22	1.422	0.040	0.55
DJJ4UT		1.340	-0.037	-0.54	1.306	-0.076	-1.05
E4NUYZ		1.384	0.007	0.10	1.388	0.006	0.09
FCV3PZ		1.494	0.117	1.71	1.492	0.110	1.52
FXQUT4		1.358	-0.019	-0.28	1.370	-0.012	-0.16
GJ8GAG		1.400	0.023	0.34	1.420	0.038	0.53
HZQXTXT		1.306	-0.071	-1.04	1.308	-0.074	-1.02
JL44EG		1.362	-0.015	-0.22	1.383	0.002	0.02
KRBUGM		1.458	0.081	1.18	1.438	0.056	0.77
KTGCFH	X	1.476	0.099	1.45	1.376	-0.006	-0.08
M2A7QL		1.300	-0.077	-1.12	1.308	-0.074	-1.02
NAVR84		1.380	0.003	0.04	1.378	-0.004	-0.05
NDV334		1.374	-0.003	-0.04	1.396	0.014	0.20
NG44FN		1.338	-0.039	-0.57	1.320	-0.062	-0.85
NGX2DW		1.444	0.067	0.98	1.432	0.050	0.69
NHBBQ3		1.382	0.005	0.07	1.376	-0.006	-0.08
NJM6BA		1.338	-0.039	-0.57	1.332	-0.050	-0.69
P3UTHZ		1.338	-0.039	-0.57	1.396	0.014	0.20
P7QL8N	X	37.960	36.583	534.53	33.260	31.878	439.49
PUF9R9		1.424	0.047	0.68	1.443	0.061	0.84
PYTTYU	X	1.608	0.231	3.38	1.352	-0.030	-0.41



Plastics Interlaboratory Testing Program

Analysis 706

Report #130

2nd Qtr 2024

Percent Elongation at Yield - Percent

WebCode	Data Flag	Sample F01			Sample F02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
REYWBY		1.258	-0.119	-1.74	1.260	-0.121	-1.67
T6NURJ		1.400	0.023	0.34	1.400	0.018	0.25
TMLARB	X	1.658	0.281	4.11	1.968	0.586	8.08
U3X8AF	X	1.682	0.305	4.46	1.712	0.330	4.55
W38WND		1.262	-0.115	-1.68	1.244	-0.138	-1.90
WFGCW3	X	1.778	0.401	5.86	1.760	0.378	5.21
WY8NJ3		1.320	-0.057	-0.83	1.334	-0.048	-0.66
X3PZ4Q		1.448	0.071	1.04	1.452	0.070	0.97
XE2DBT		1.400	0.023	0.34	1.400	0.018	0.25
Y4QPEX		1.368	-0.009	-0.13	1.422	0.040	0.55
YD3KZR		1.332	-0.045	-0.66	1.376	-0.006	-0.08
YF7KTC		1.410	0.033	0.48	1.400	0.018	0.25
YTDBVJ		1.460	0.083	1.21	1.420	0.038	0.53
Z96D2F		1.390	0.013	0.19	1.402	0.020	0.28
ZCYLUN		1.356	-0.021	-0.31	1.388	0.006	0.09
ZPQBR9		1.402	0.025	0.36	1.368	-0.014	-0.19

Summary Statistics

Sample F01

Sample F02

Grand Means

1.3770 Percent

1.3818 Percent

Stnd Dev Btwn Labs

0.0684 Percent

0.0725 Percent

Statistics based on 41 of 51 reporting participants

Sample F01: HIPS & Sample F02: HIPS



Plastics Interlaboratory Testing Program

Analysis 706

Percent Elongation at Yield - Percent

Report #130

2nd Qtr 2024

Comments on Assigned Data Flags for Test #706

- 4D9J6B (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample F01.
- PYTTYU (X) - Data for sample F01 are high. Inconsistent within the determinations of sample F01.
- 823Q22 (X) - Data for both samples are high. Possible Systematic Error.
- U3X8AF (X) - Data for both samples are high. Possible Systematic Error.
- 8E7C26 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample F01.
- P7QL8N (X) - Extreme data.
- WFGCW3 (X) - Data for both samples are high. Possible Systematic Error.
- TMLARB (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of both samples.
- 24MPR3 (X) - Data for both samples are high. Possible Systematic Error.
- KTGCFH (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.



Plastics Interlaboratory Testing Program

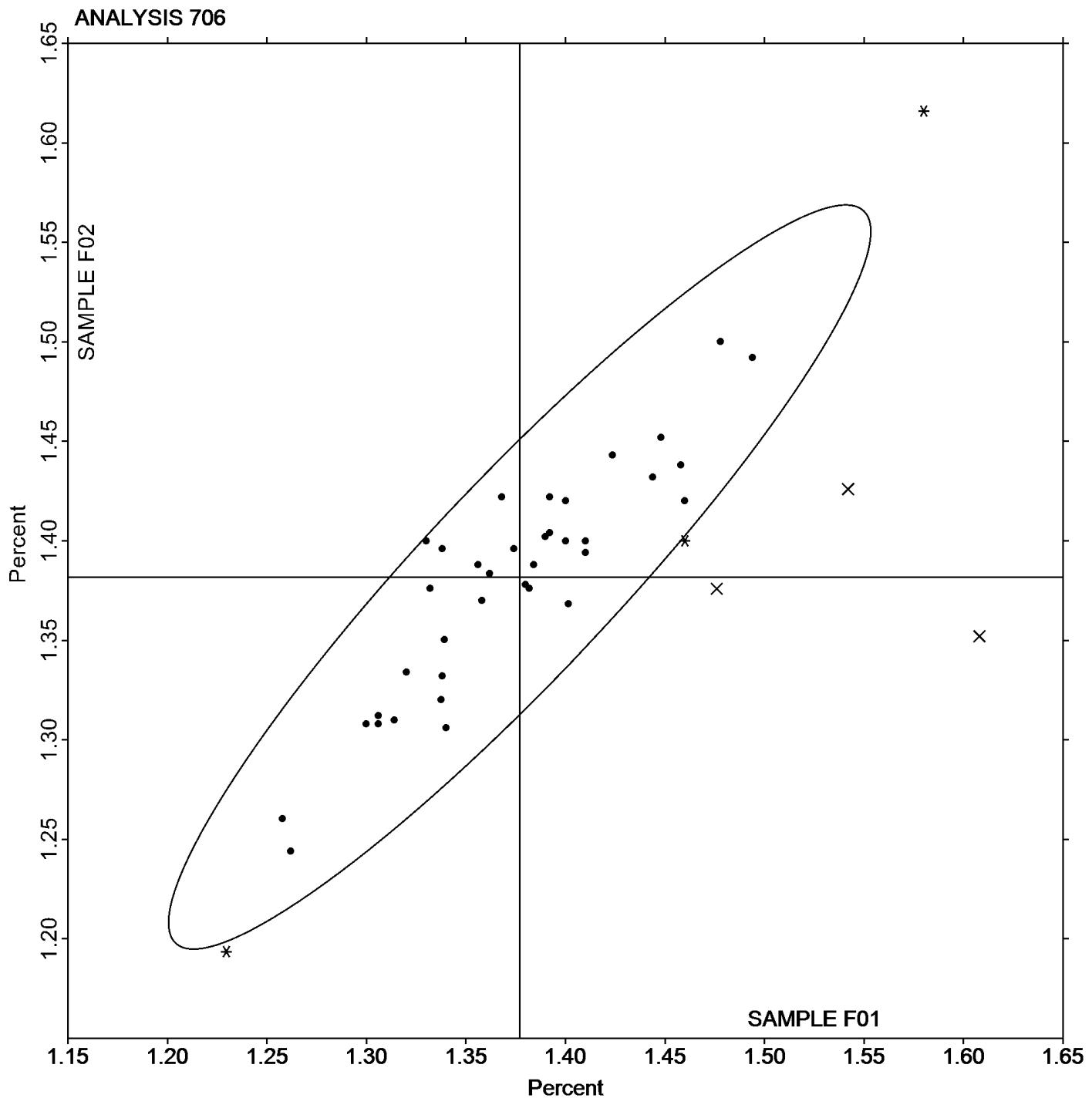
Analysis 706

Report #130

2nd Qtr 2024

Percent Elongation at Yield - Percent

Grand Mean Sample F01: 1.3770 Percent Grand Mean Sample F02: 1.3818 Percent





Plastics Interlaboratory Testing Program

Analysis 708

Report #130

2nd Qtr 2024

Modulus of Elasticity - ksi

WebCode	Data Flag	Sample F01			Sample F02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
24MPR3		302.80	-33.27	-1.31	305.60	-30.59	-1.18
4D9J6B		334.35	-1.72	-0.07	339.18	2.99	0.12
6BCGNL	X	369.82	33.75	1.33	349.84	13.65	0.53
7C6PAB		328.90	-7.17	-0.28	327.42	-8.77	-0.34
823Q22	*	278.20	-57.87	-2.28	270.80	-65.39	-2.53
8E7C26		335.48	-0.59	-0.02	338.72	2.53	0.10
8WLJD2		323.40	-12.67	-0.50	321.20	-14.99	-0.58
9EKYDR		337.38	1.31	0.05	337.70	1.51	0.06
ALFKFC		391.40	55.33	2.18	391.04	54.85	2.12
BD3LUD		342.96	6.89	0.27	342.61	6.42	0.25
BF9ZH8		383.12	47.05	1.85	385.16	48.97	1.89
BHAEFW		335.88	-0.19	-0.01	333.54	-2.65	-0.10
BMRC9T	X	330.10	-5.97	-0.24	350.33	14.14	0.55
CWAFTX		320.74	-15.33	-0.60	325.84	-10.35	-0.40
DJJ4UT	X	340.12	4.05	0.16	318.54	-17.65	-0.68
E4NUYZ		341.12	5.05	0.20	343.78	7.59	0.29
FCV3PZ		306.92	-29.15	-1.15	305.00	-31.19	-1.20
FXQUT4		350.47	14.40	0.57	346.73	10.54	0.41
GJ8GAG		326.04	-10.03	-0.40	327.70	-8.49	-0.33
HZQTXT	*	378.72	42.65	1.68	389.80	53.61	2.07
JL44EG		321.06	-15.01	-0.59	318.34	-17.85	-0.69
KRBUGM		352.06	15.99	0.63	358.84	22.65	0.87
KTGCFH		274.96	-61.11	-2.41	276.03	-60.16	-2.32
M2A7QL		347.46	11.39	0.45	354.68	18.49	0.71
NAVR84		335.07	-1.00	-0.04	332.52	-3.67	-0.14
NDV334		333.45	-2.62	-0.10	334.13	-2.06	-0.08
NG44FN		347.94	11.87	0.47	345.76	9.57	0.37
NHBBQ3		352.85	16.78	0.66	357.19	21.00	0.81
NJM6BA		346.20	10.13	0.40	344.20	8.01	0.31
P3UTHZ		348.60	12.53	0.49	349.46	13.27	0.51
P7QL8N	X	319.60	-16.47	-0.65	362.00	25.81	1.00
PUF9R9		349.75	13.68	0.54	347.86	11.67	0.45
PYTTYU		328.52	-7.55	-0.30	328.86	-7.33	-0.28
REYWBY		352.02	15.95	0.63	349.14	12.95	0.50
T6NURJ		331.65	-4.43	-0.17	331.12	-5.07	-0.20



Plastics Interlaboratory Testing Program

Analysis 708

Report #130

2nd Qtr 2024

Modulus of Elasticity - ksi

WebCode	Data Flag	Sample F01			Sample F02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TMLARB		338.76	2.69	0.11	344.18	7.99	0.31
TQTJ8M	X	274.32	-61.75	-2.43	253.52	-82.67	-3.19
U3X8AF		271.60	-64.47	-2.54	271.40	-64.79	-2.50
W38WND		339.42	3.35	0.13	341.76	5.57	0.22
WFGCW3	*	280.54	-55.53	-2.19	285.40	-50.79	-1.96
WY8NJ3		339.70	3.63	0.14	336.10	-0.09	0.00
X3PZ4Q		343.36	7.29	0.29	341.24	5.05	0.20
XE2DBT		343.00	6.93	0.27	341.40	5.21	0.20
Y4QPEX		354.00	17.93	0.71	350.40	14.21	0.55
YD3KZR		360.07	24.00	0.95	352.64	16.45	0.64
YF7KTC		333.28	-2.79	-0.11	330.16	-6.03	-0.23
YTDBVJ		325.47	-10.60	-0.42	324.89	-11.30	-0.44
Z96D2F		336.94	0.87	0.03	337.88	1.69	0.07
ZCYLUN		351.38	15.31	0.60	352.24	16.05	0.62
ZPQBR9		366.24	30.17	1.19	358.92	22.73	0.88

Summary Statistics

Sample F01

Sample F02

Grand Means

336.072 ksi

336.190 ksi

Stnd Dev Btwn Labs

25.371 ksi

25.887 ksi

Statistics based on 45 of 50 reporting participants

Sample F01: HIPS & Sample F02: HIPS

Comments on Assigned Data Flags for Test #708

- TQTJ8M (X) - Data for sample F02 are low. Inconsistent within the determinations of both samples.
- 6BCGNL (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample F01.
- P7QL8N (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.
- BMRC9T (X) - Inconsistent in testing between samples.
- DJJ4UT (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample F02.



Plastics Interlaboratory Testing Program

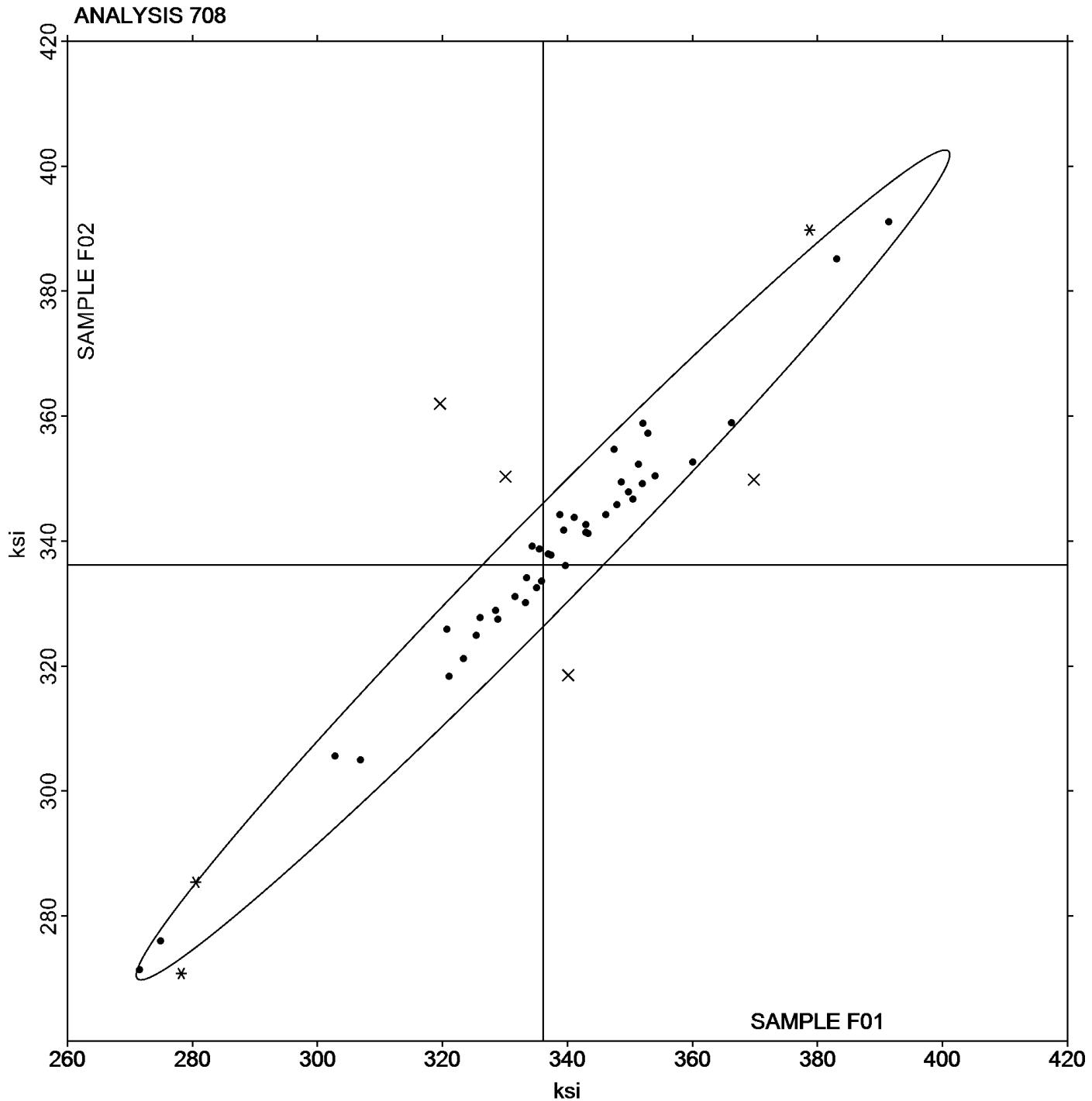
Analysis 708

Modulus of Elasticity - ksi

Report #130

2nd Qtr 2024

Grand Mean Sample F01: 336.07 ksi Grand Mean Sample F02: 336.19 ksi





Plastics Interlaboratory Testing Program

Analysis 710

Report #130

2nd Qtr 2024

Deflection Temp. Under Flexural Load (1.82 MPa) - Degrees C

WebCode	Data Flag	Sample E01			Sample E02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
36E6FJ		77.00	0.26	0.29	77.03	0.25	0.28	TO
823Q22		77.03	0.28	0.32	76.85	0.08	0.09	TO
8TPQND		75.90	-0.84	-0.96	76.33	-0.45	-0.51	TO
A8U6CC		77.28	0.53	0.61	77.43	0.65	0.73	CE
BD3LUD		75.31	-1.43	-1.63	75.18	-1.59	-1.79	TO
BF9ZH8	X	168.28	91.53	104.44	168.25	91.48	102.93	TO
CWAFTX		77.15	0.41	0.46	77.23	0.45	0.51	CE
DJJ4UT		77.05	0.31	0.35	77.05	0.28	0.31	IN
DNWN2E		77.23	0.48	0.55	77.33	0.55	0.62	IN
EVA99	*	76.33	-0.42	-0.48	77.20	0.43	0.48	TO
FXQUT4		75.65	-1.09	-1.25	75.63	-1.15	-1.29	TO
HZQTXT		77.00	0.26	0.29	76.95	0.18	0.20	TO
JB7ZAM	X	84.65	7.91	9.02	86.18	9.40	10.58	IN
M2A7QL		77.28	0.53	0.61	77.28	0.50	0.56	IN
M8AQKV		77.03	0.28	0.32	77.03	0.25	0.28	CE
NAVR84		76.75	0.01	0.01	76.70	-0.07	-0.08	TY
NDV334		76.55	-0.19	-0.22	76.63	-0.15	-0.17	TY
NHBBQ3		76.63	-0.12	-0.14	76.50	-0.27	-0.31	IN
NJM6BA		78.23	1.49	1.70	78.68	1.90	2.14	DN
P3UTHZ		76.00	-0.74	-0.85	76.10	-0.67	-0.76	IN
PYTTYU		76.85	0.11	0.12	76.85	0.08	0.09	IN
QRP7KY		75.55	-1.19	-1.36	75.38	-1.40	-1.57	XA
U3X8AF	*	79.20	2.46	2.80	79.20	2.43	2.73	XX
UGZGDP		75.38	-1.37	-1.56	75.43	-1.35	-1.52	TO
X3PZ4Q	X	83.00	6.26	7.14	82.88	6.10	6.87	TO
XE2DBT		77.10	0.36	0.41	76.77	-0.01	-0.01	CF
XMB2NR		76.73	-0.02	-0.02	76.65	-0.12	-0.14	AT
XQB4YL		76.50	-0.24	-0.28	77.08	0.30	0.34	IN
YD3KZR		75.35	-1.39	-1.59	75.48	-1.30	-1.46	CE
YTDBVJ		77.60	0.86	0.98	76.90	0.13	0.14	IN
Z96D2F		77.23	0.48	0.55	76.88	0.10	0.11	ZW



Plastics Interlaboratory Testing Program

Analysis 710

Report #130

2nd Qtr 2024

Deflection Temp. Under Flexural Load (1.82 MPa) - Degrees C

Summary Statistics

Sample E01

Sample E02

Grand Means

76.744 Degrees C

76.774 Degrees C

Stnd Dev Btwn Labs

0.876 Degrees C

0.889 Degrees C

Statistics based on 28 of 31 reporting participants

Sample E01: HIPS & Sample E02: HIPS

Comments on Assigned Data Flags for Test #710

BF9ZH8 (X) - Extreme data.

X3PZ4Q (X) - Data for both samples are high. Possible Systematic Error.

JB7ZAM (X) - Data for both samples are high. Possible Systematic Error.

Key to Instrument Codes Reported by Participants

AT Atlas
CF Coesfeld
IN Instron
TY Toyoseiki
XX Instrument manufacturer not specified by lab

CE Ceast
DN DYNISCO
TO Tinius Olsen
XA Special In-House Instrument
ZW Zwick



Plastics Interlaboratory Testing Program

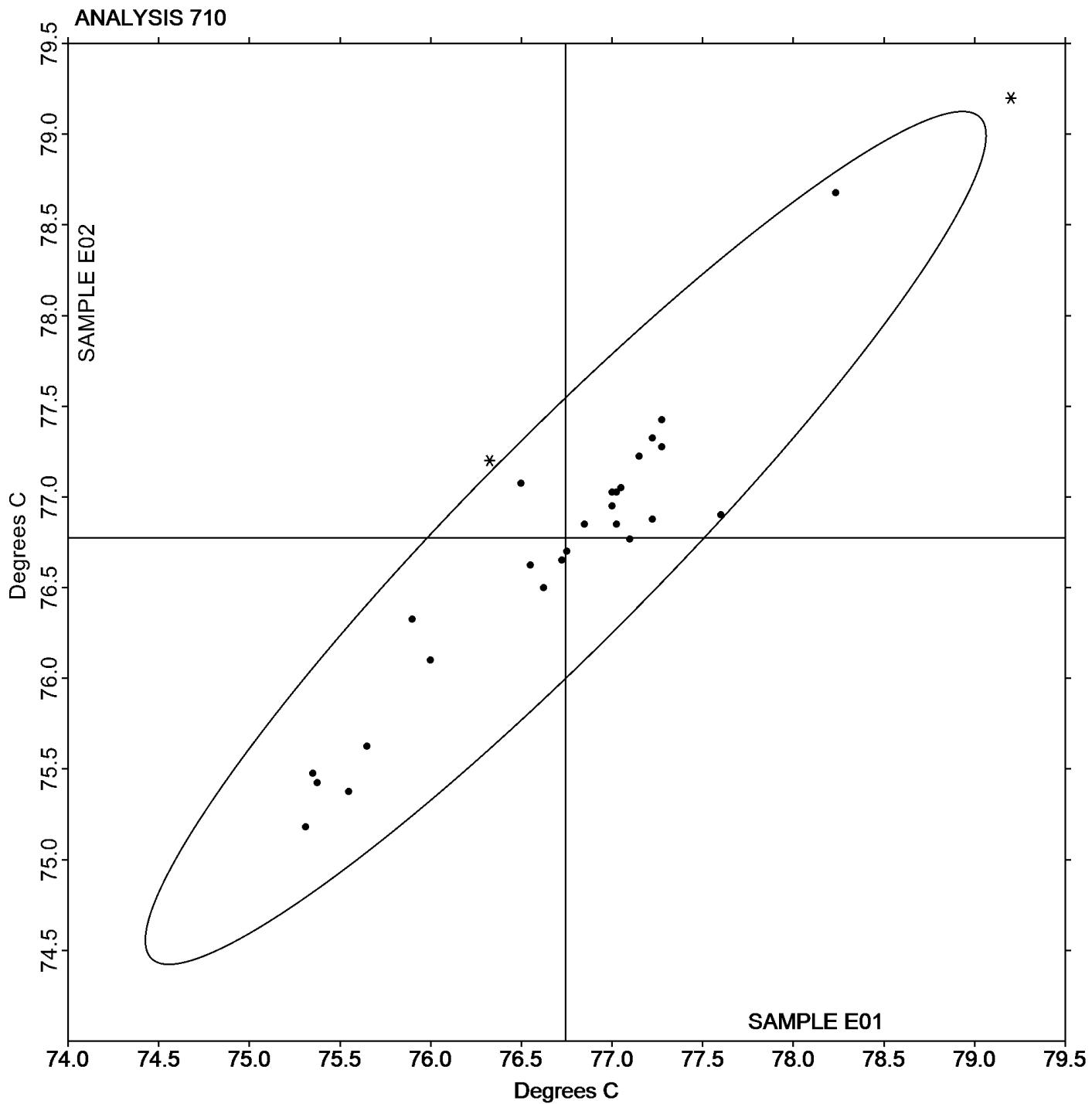
Analysis 710

Report #130

2nd Qtr 2024

Deflection Temp. Under Flexural Load (1.82 MPa) - Degrees C

Grand Mean Sample E01: 76.744 Degrees C Grand Mean Sample E02: 76.774 Degrees C





Plastics Interlaboratory Testing Program

Analysis 711

Report #130

2nd Qtr 2024

Deflection Temp. Under Flexural Load (0.455 MPa) - Degrees C

WebCode	Data Flag	Sample G01			Sample G02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
36E6FJ		114.8	-1.1	-0.08	114.4	-0.9	-0.07	TO
3RP9DL		108.8	-7.2	-0.53	109.3	-6.1	-0.51	XX
823Q22		113.3	-2.7	-0.20	113.0	-2.4	-0.20	TO
9CZXJ7		107.3	-8.7	-0.64	107.5	-7.8	-0.66	XX
A8U6CC		113.6	-2.3	-0.17	113.2	-2.1	-0.18	CE
JB7ZAM	*	149.9	34.0	2.50	140.1	24.8	2.10	IN
NHBBQ3		111.3	-4.6	-0.34	109.8	-5.5	-0.46	IN
PYTTYU		107.5	-8.4	-0.62	108.6	-6.7	-0.57	IN
TTCK29		105.3	-10.7	-0.78	106.4	-9.0	-0.76	IN
UGZGDP		111.2	-4.7	-0.35	112.1	-3.3	-0.28	TO
X3PZ4Q	*	144.7	28.8	2.11	144.8	29.5	2.49	XX
XE2DBT		113.8	-2.2	-0.16	114.4	-0.9	-0.08	CE
YD3KZR		109.4	-6.5	-0.48	108.2	-7.1	-0.60	CE
Z96D2F		112.3	-3.7	-0.27	112.7	-2.6	-0.22	ZW

Summary Statistics	Sample G01	Sample G02
Grand Means	115.93 Degrees C	115.31 Degrees C
Stnd Dev Btwn Labs	13.62 Degrees C	11.83 Degrees C

Statistics based on 14 of 14 reporting participants

Sample G01: PP & Sample G02: PP

Key to Instrument Codes Reported by Participants

CE Ceast

IN Instron

TO Tinius Olsen

XX Instrument manufacturer not specified by lab

ZW Zwick



Plastics Interlaboratory Testing Program

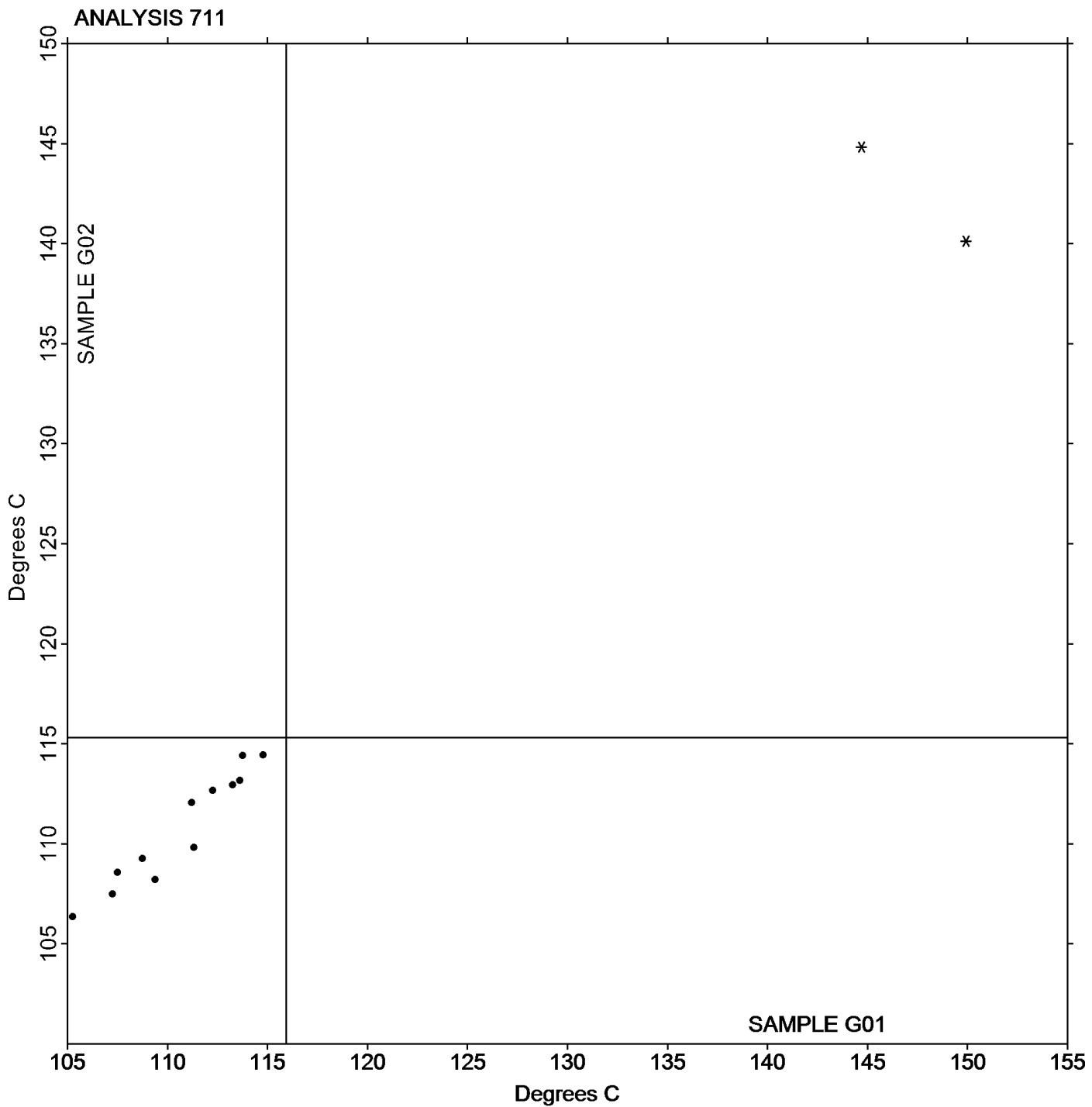
Analysis 711

Report #130

2nd Qtr 2024

Deflection Temp. Under Flexural Load (0.455 MPa) - Degrees C

Grand Mean Sample G01: 115.93 Degrees C Grand Mean Sample G02: 115.31 Degrees C



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Plastics Interlaboratory Testing Program

Analysis 712

Report #130

2nd Qtr 2024

Temp. of Deflection Under Flexural Load (1.80 MPa) - Degrees C

WebCode	Data Flag	Sample N01			Sample N02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
384ACW		83.30	0.37	0.45	83.14	0.20	0.25	ZW
3RP9DL		82.88	-0.05	-0.06	82.60	-0.34	-0.43	XX
823Q22		81.35	-1.58	-1.88	81.35	-1.59	-1.99	TO
9CZXJ7		82.33	-0.60	-0.72	82.50	-0.44	-0.55	XX
9P3F7Y		83.08	0.15	0.18	83.33	0.38	0.48	IN
A8U6CC		83.13	0.20	0.24	83.18	0.23	0.29	CE
CNWEFA	*	82.85	-0.08	-0.09	82.30	-0.64	-0.80	CE
CPE7RE		82.48	-0.45	-0.54	82.45	-0.49	-0.62	TO
CWAFTX		83.33	0.40	0.48	83.20	0.26	0.32	CE
DJJ4UT		83.65	0.72	0.87	83.50	0.56	0.70	IN
EVQ829		83.03	0.10	0.12	83.20	0.26	0.32	TO
EYPHW9		81.95	-0.98	-1.17	82.43	-0.52	-0.65	IN
FLF7YK		83.63	0.70	0.84	83.70	0.76	0.95	XX
H3HPMM		83.33	0.40	0.48	83.43	0.48	0.60	XX
HZTC64		81.58	-1.35	-1.62	81.93	-1.02	-1.27	ZW
JLNKUJ		84.30	1.37	1.64	84.23	1.28	1.61	IN
KLMX4X		82.68	-0.25	-0.30	82.63	-0.32	-0.40	CE
L2CPWX		82.50	-0.43	-0.52	82.40	-0.55	-0.68	TO
N6PXET		83.25	0.32	0.39	83.28	0.33	0.42	XX
NAVR84		82.63	-0.30	-0.36	82.75	-0.19	-0.24	TY
NDV334		82.80	-0.13	-0.15	82.63	-0.32	-0.40	TY
NGX2DW		82.00	-0.93	-1.11	82.28	-0.67	-0.83	CE
NHBBQ3		83.65	0.72	0.87	83.45	0.51	0.64	IN
NHPW3Q		82.00	-0.93	-1.11	82.18	-0.77	-0.96	CE
NJM6BA	X	87.88	4.95	5.92	88.95	6.01	7.52	DN
P3UTHZ		81.78	-1.15	-1.38	81.68	-1.27	-1.59	IN
P9HHWH		84.83	1.90	2.27	84.85	1.91	2.39	XX
PYTTYU		83.38	0.45	0.54	83.20	0.26	0.32	IN
QCEJHW		82.85	-0.08	-0.09	83.08	0.13	0.17	CE
QCT32U		82.63	-0.30	-0.36	82.60	-0.34	-0.43	ZW
RJV8XK		82.53	-0.40	-0.48	82.40	-0.54	-0.68	IN
RK8B3V		82.88	-0.04	-0.05	82.96	0.02	0.02	ZW
TQ9WKX		82.85	-0.08	-0.09	83.05	0.11	0.14	IN
TRYVXW		83.63	0.70	0.84	83.48	0.53	0.67	CE
U3X8AF	*	85.05	2.12	2.54	85.25	2.31	2.89	XX



Plastics Interlaboratory Testing Program

Analysis 712

Report #130

2nd Qtr 2024

Temp. of Deflection Under Flexural Load (1.80 MPa) - Degrees C

WebCode	Data Flag	Sample N01			Sample N02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
U93P6V		82.30	-0.63	-0.75	82.13	-0.82	-1.02	CE
WDQBNU		83.28	0.35	0.42	83.33	0.38	0.48	IN
XANR48		83.83	0.90	1.07	83.73	0.78	0.98	XX
XE2DBT		84.00	1.07	1.28	83.60	0.66	0.82	CF
YD3KZR		81.30	-1.63	-1.94	81.68	-1.27	-1.59	CE
YTDBVJ		83.03	0.10	0.12	83.45	0.51	0.64	IN
YVJTF		82.23	-0.70	-0.84	82.18	-0.77	-0.96	CE

Summary Statistics

Sample N01

Sample N02

Grand Means

82.926 Degrees C

82.942 Degrees C

Stnd Dev Btwn Labs

0.836 Degrees C

0.799 Degrees C

Statistics based on 41 of 42 reporting participants

Sample N01: ABS & Sample N02: ABS

Comments on Assigned Data Flags for Test #712

NJM6BA (X) - Data for both samples are high. Possible Systematic Error.

Key to Instrument Codes Reported by Participants

CE Ceast

CF Coesfeld

DN DYNISCO

IN Instron

TO Tinius Olsen

TY Toyoseiki

XX Instrument manufacturer not specified by lab

ZW Zwick



Plastics Interlaboratory Testing Program

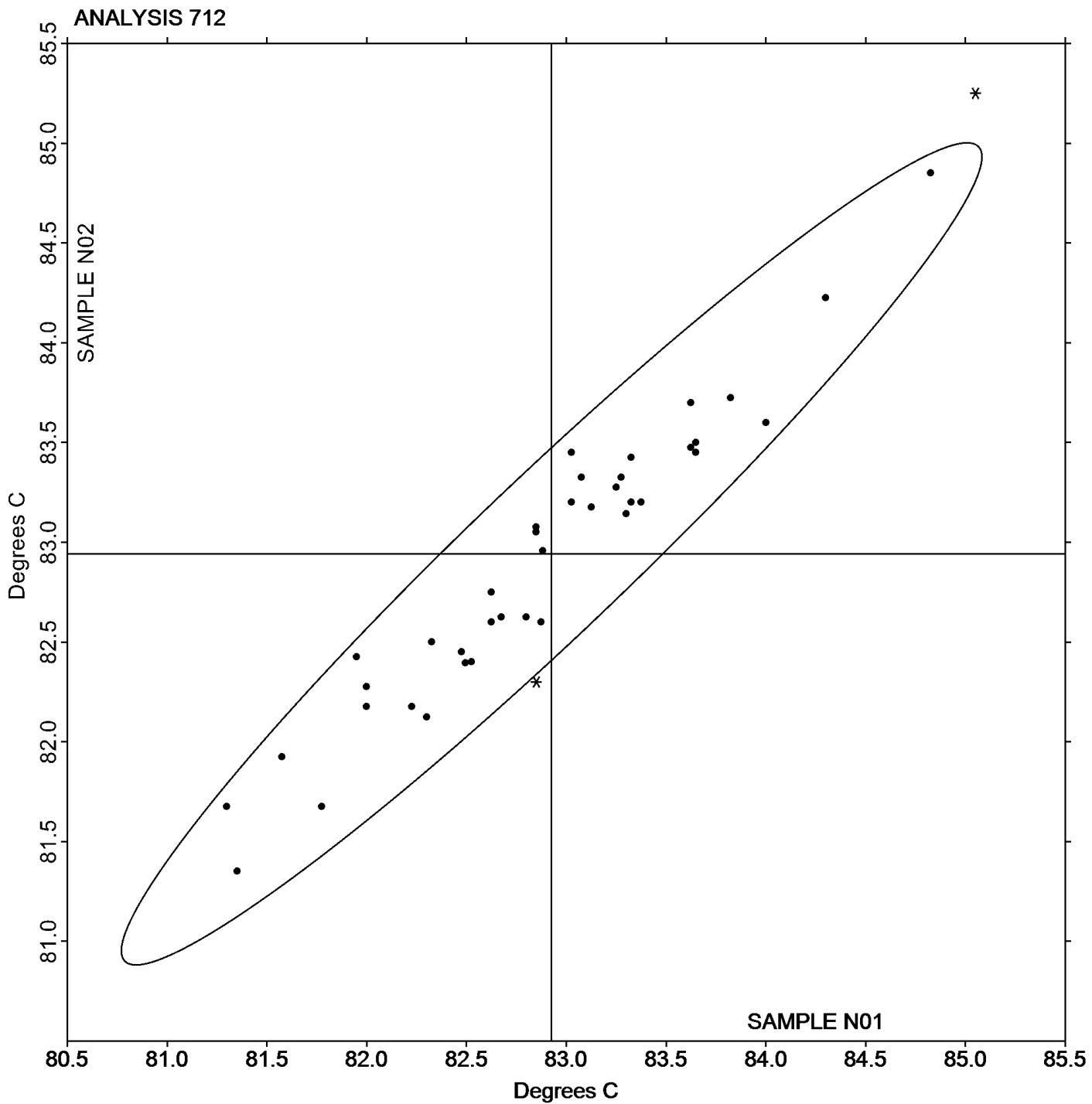
Analysis 712

Report #130

2nd Qtr 2024

Temp. of Deflection Under Flexural Load (1.80 MPa) - Degrees C

Grand Mean Sample N01: 82.926 Degrees C Grand Mean Sample N02: 82.942 Degrees C





Plastics Interlaboratory Testing Program

Analysis 715

Report #130

2nd Qtr 2024

Vicat Softening Temperature (Rate A)

WebCode	Data Flag	Sample H01			Sample H02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
732MYB	X	91.68	-4.33	-6.99	91.90	-4.05	-9.64	CE
7ADQVC		95.55	-0.46	-0.75	95.50	-0.45	-1.07	CE
CGUHLC		95.62	-0.40	-0.64	95.78	-0.17	-0.39	IN
CWAFTX		96.13	0.12	0.19	96.10	0.15	0.36	CE
DJJ4UT		96.05	0.04	0.06	96.05	0.10	0.24	IN
HZQXTXT		96.42	0.40	0.65	96.32	0.37	0.88	TO
JB7ZAM	X	102.08	6.07	9.80	102.15	6.20	14.77	IN
KLMX4X		95.45	-0.56	-0.91	95.47	-0.48	-1.15	CE
L79CUR		95.65	-0.36	-0.59	95.63	-0.32	-0.75	RO
NDV334		96.87	0.85	1.38	96.33	0.38	0.92	TY
NHBBQ3		96.03	0.02	0.03	96.07	0.12	0.28	IN
NJM6BA	*	97.83	1.82	2.94	97.10	1.15	2.74	DN
PYTTYU		96.80	0.79	1.27	96.50	0.55	1.31	CF
QCT32U		95.77	-0.25	-0.40	95.90	-0.05	-0.12	WZ
TQ9WKX		95.67	-0.35	-0.56	95.68	-0.27	-0.63	XX
TRYVXW		95.85	-0.17	-0.27	95.78	-0.17	-0.40	CF
U3X8AF		95.55	-0.46	-0.75	95.73	-0.22	-0.51	XX
XE2DBT		95.97	-0.05	-0.08	95.87	-0.08	-0.19	CF
YD3KZR		95.08	-0.93	-1.50	95.25	-0.70	-1.66	CE
YTDBVJ		95.53	-0.48	-0.77	95.62	-0.33	-0.79	AT
Z96D2F		96.33	0.32	0.52	96.17	0.22	0.52	WZ
ZPQBR9		96.12	0.11	0.17	96.12	0.17	0.42	WZ

Summary Statistics	Sample H01	Sample H02
Grand Means	96.013 Degrees C	95.949 Degrees C
Stnd Dev Btwn Labs	0.620 Degrees C	0.420 Degrees C

Statistics based on 20 of 22 reporting participants

Sample H01: HIPS & Sample H02: HIPS

Comments on Assigned Data Flags for Test #715

732MYB (X) - Data for both samples are low.

JB7ZAM (X) - Data for both samples are high.



Plastics Interlaboratory Testing Program
Analysis 715
Vicat Softening Temperature (Rate A)

Report #130
2nd Qtr 2024

Key to Instrument Codes Reported by Participants

AT	Atlas	CE	Ceast
CF	Coesfeld	DN	DYNISCO
IN	Instron	RO	Rosand
TO	Tinius Olsen	TY	Toyoseiki
WZ	Zwick	XX	Instrument manufacturer not specified by lab



Plastics Interlaboratory Testing Program

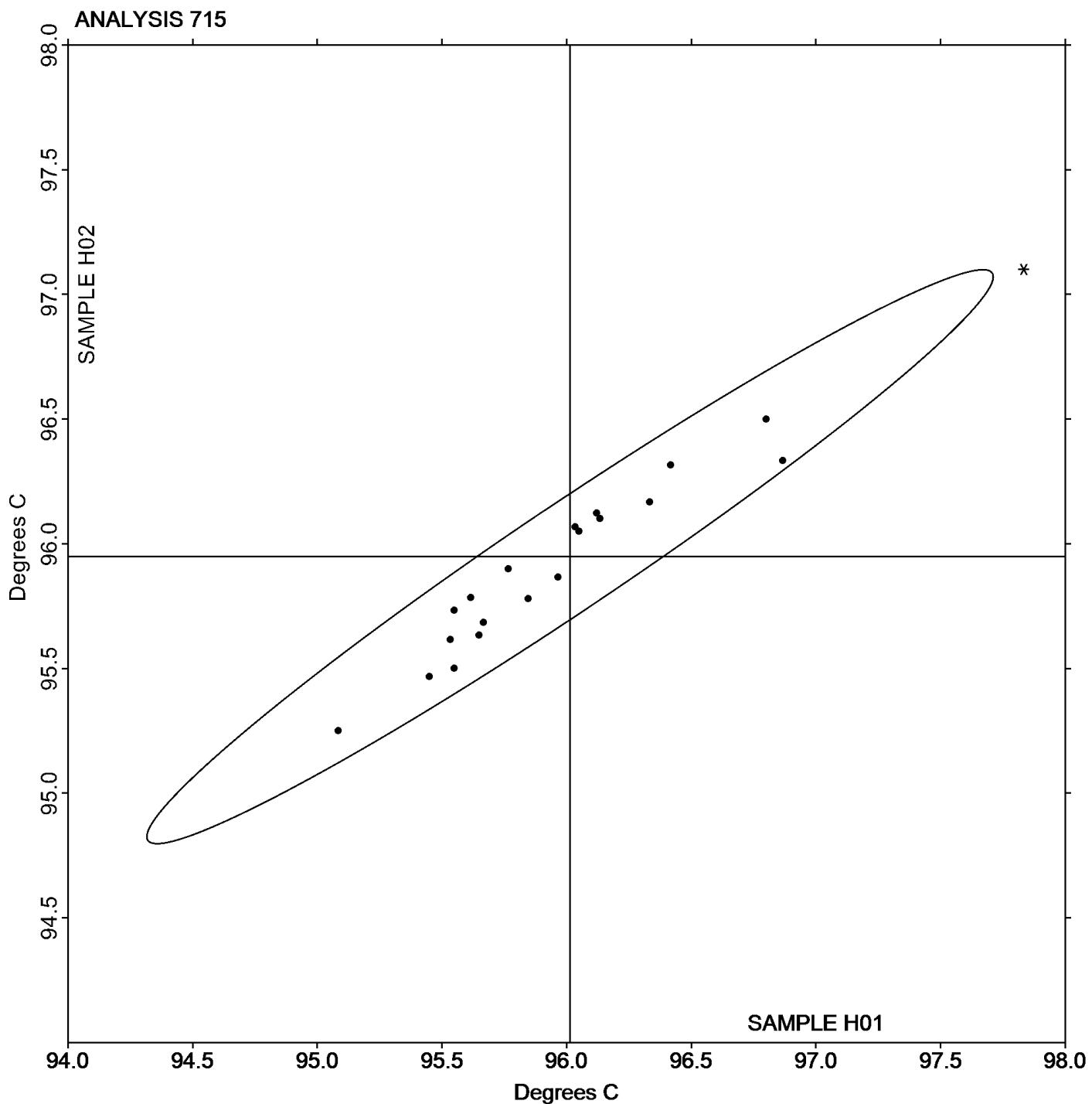
Analysis 715

Report #130

2nd Qtr 2024

Vicat Softening Temperature (Rate A)

Grand Mean Sample H01: 96.013 Degrees C Grand Mean Sample H02: 95.949 Degrees C





Plastics Interlaboratory Testing Program

Analysis 716

Report #130

2nd Qtr 2024

Vicat Softening Temperature (Rate B)

WebCode	Data Flag	Sample R01			Sample R02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
732MYB	*	91.37	-6.26	-3.06	91.53	-6.20	-2.89	CE
CGUHLC		97.92	0.29	0.14	98.02	0.29	0.13	IN
CWAFTX		98.38	0.76	0.37	98.60	0.87	0.41	CE
DJJ4UT		98.35	0.72	0.35	98.45	0.72	0.34	IN
FXQUT4		97.40	-0.23	-0.11	97.37	-0.36	-0.17	TO
HZQXTXT		98.32	0.69	0.34	98.38	0.65	0.30	TO
JB7ZAM		94.10	-3.53	-1.72	94.10	-3.63	-1.69	IN
KLMX4X		97.47	-0.16	-0.08	97.42	-0.31	-0.15	CE
L79CUR		97.97	0.34	0.17	98.23	0.50	0.23	RO
NDV334		98.70	1.07	0.52	98.63	0.90	0.42	TY
NHBBQ3		98.18	0.56	0.27	98.33	0.60	0.28	IN
NJM6BA		94.83	-2.80	-1.37	94.60	-3.13	-1.46	DN
PYTTYU		98.20	0.57	0.28	98.27	0.54	0.25	CF
QCT32U		98.22	0.59	0.29	98.65	0.92	0.43	CE
TQ9WKX		97.95	0.32	0.16	98.15	0.42	0.20	XX
TRYVXW		98.46	0.84	0.41	98.24	0.51	0.24	CF
U3X8AF	X	97.50	-0.13	-0.06	95.92	-1.81	-0.84	XX
XE2DBT		98.63	1.01	0.49	98.43	0.70	0.33	CF
YTDBVJ		98.20	0.57	0.28	98.22	0.49	0.23	AT
Z96D2F		98.63	1.01	0.49	98.85	1.12	0.52	WZ
ZPQBR9	*	101.25	3.62	1.77	102.12	4.39	2.04	DN

Summary Statistics

Sample R01

Sample R02

Grand Means

97.626 Degrees C

97.729 Degrees C

Stnd Dev Btwn Labs

2.049 Degrees C

2.148 Degrees C

Statistics based on 20 of 21 reporting participants

Sample R01: HIPS & Sample R02: HIPS

Comments on Assigned Data Flags for Test #716

U3X8AF (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample R02.



Plastics Interlaboratory Testing Program
Analysis 716
Vicat Softening Temperature (Rate B)

Report #130
2nd Qtr 2024

Key to Instrument Codes Reported by Participants

AT	Atlas	CE	Ceast
CF	Coesfeld	DN	DYNISCO
IN	Instron	RO	Rosand
TO	Tinius Olsen	TY	Toyoseiki
WZ	Zwick	XX	Instrument manufacturer not specified by lab



Plastics Interlaboratory Testing Program

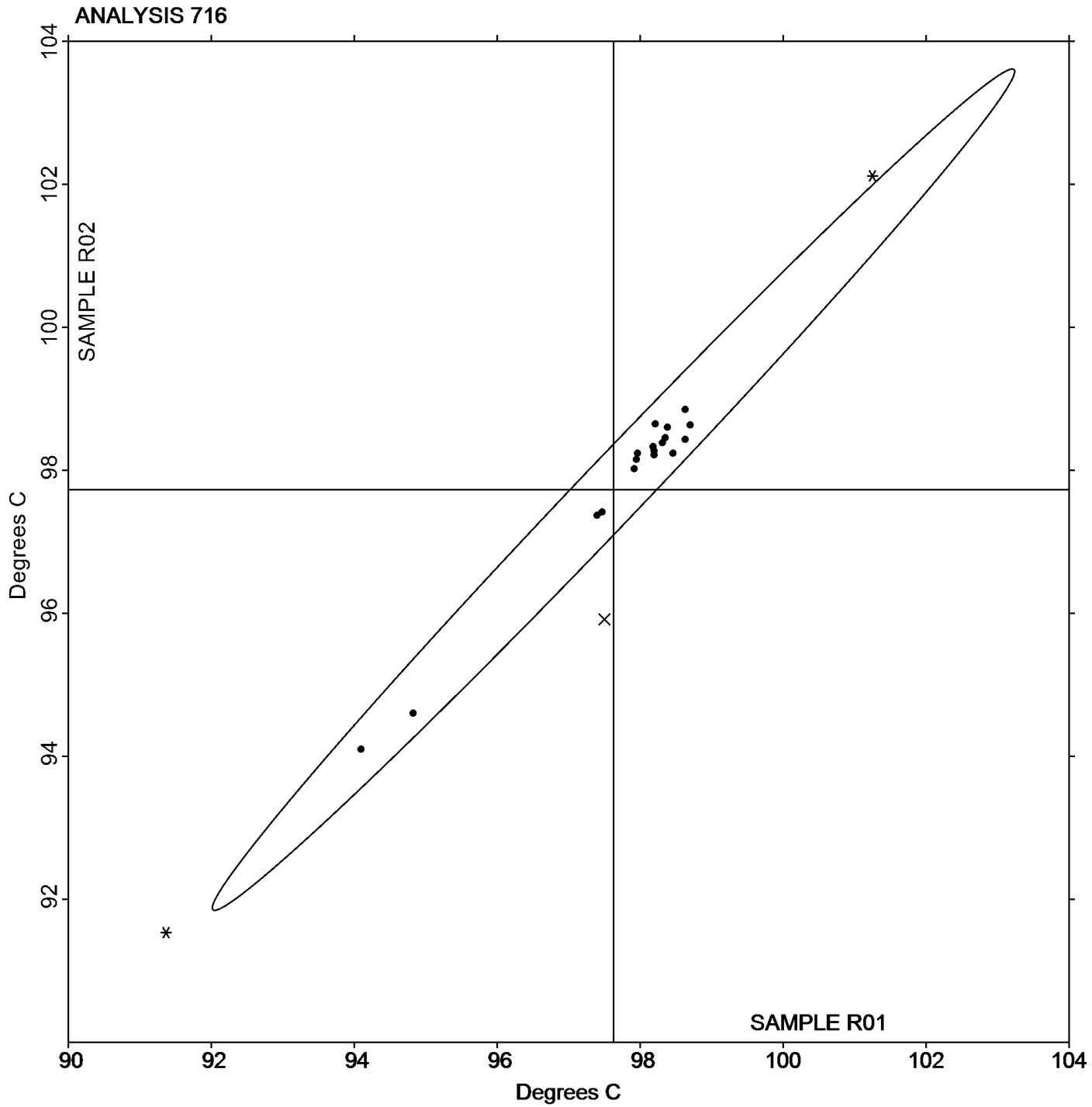
Analysis 716

Report #130

2nd Qtr 2024

Vicat Softening Temperature (Rate B)

Grand Mean Sample R01: 97.626 Degrees C Grand Mean Sample R02: 97.729 Degrees C





Plastics Interlaboratory Testing Program

Analysis 718

Specific Gravity - sp gr 23/23 C

Report #130

2nd Qtr 2024

WebCode	Data Flag	Sample T01			Sample T02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
24MPR3		1.03300	-0.00129	-0.48	1.03200	-0.00254	-1.00
2Q2AN4		1.02807	-0.00622	-2.30	1.02833	-0.00621	-2.45
36E6FJ		1.03613	0.00185	0.68	1.03620	0.00166	0.65
384ACW		1.03333	-0.00095	-0.35	1.03233	-0.00221	-0.87
3A6EPH		1.03677	0.00248	0.92	1.03697	0.00242	0.96
3RP9DL		1.03633	0.00205	0.76	1.03667	0.00212	0.84
44CWNB		1.03277	-0.00152	-0.56	1.03207	-0.00248	-0.98
4D2LLY		1.03410	-0.00019	-0.07	1.03680	0.00226	0.89
6HUZRL		1.03200	-0.00229	-0.85	1.03267	-0.00188	-0.74
6YLKMN		1.03403	-0.00025	-0.09	1.03403	-0.00051	-0.20
7BNRGB		1.03520	0.00091	0.34	1.03583	0.00129	0.51
823Q22		1.03443	0.00015	0.05	1.03473	0.00019	0.08
8FX9QY		1.02933	-0.00495	-1.83	1.03033	-0.00421	-1.66
8QGMRF		1.03480	0.00051	0.19	1.03450	-0.00004	-0.02
8WN4AG		1.03360	-0.00069	-0.25	1.03357	-0.00098	-0.39
9CZXJ7		1.03667	0.00238	0.88	1.03567	0.00112	0.44
9P3F7Y		1.02970	-0.00459	-1.70	1.03163	-0.00291	-1.15
A8U6CC		1.03760	0.00331	1.22	1.03737	0.00282	1.11
ALFKFC	*	1.02820	-0.00609	-2.25	1.03087	-0.00368	-1.45
BD3LUD		1.03533	0.00105	0.39	1.03467	0.00012	0.05
CJLDB6	X	1.02170	-0.01259	-4.65	1.00483	-0.02971	-11.73
CNWEFA		1.03533	0.00105	0.39	1.03533	0.00079	0.31
CPE7RE		1.03467	0.00038	0.14	1.03467	0.00012	0.05
CWAFTX		1.03710	0.00281	1.04	1.03617	0.00162	0.64
CXL CX3		1.03357	-0.00072	-0.27	1.03627	0.00172	0.68
DGR86Y		1.03650	0.00222	0.82	1.03675	0.00221	0.87
DJJ4UT		1.02810	-0.00619	-2.29	1.02850	-0.00604	-2.39
DT8UGK		1.04000	0.00571	2.11	1.04000	0.00546	2.15
ECUZ99		1.03760	0.00331	1.22	1.03783	0.00329	1.30
EVA99		1.03790	0.00361	1.34	1.03743	0.00289	1.14
EYPHW9		1.03673	0.00245	0.90	1.03670	0.00216	0.85
FCV3PZ		1.03377	-0.00052	-0.19	1.03640	0.00186	0.73
FNKYQX		1.03500	0.00071	0.26	1.03500	0.00046	0.18
FY67PM		1.03447	0.00018	0.07	1.03453	-0.00001	0.00
GQLLJT		1.03717	0.00288	1.06	1.03687	0.00232	0.92



Plastics Interlaboratory Testing Program

Analysis 718

Specific Gravity - sp gr 23/23 C

Report #130

2nd Qtr 2024

WebCode	Data Flag	Sample T01			Sample T02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
GWDT22		1.03270	-0.00159	-0.59	1.03287	-0.00168	-0.66
HEUBT2		1.03730	0.00301	1.11	1.03730	0.00276	1.09
J4NUDF		1.03077	-0.00352	-1.30	1.03223	-0.00231	-0.91
J92FK2		1.03133	-0.00295	-1.09	1.03200	-0.00254	-1.00
JLNKUJ		1.03233	-0.00195	-0.72	1.03233	-0.00221	-0.87
JZLTBX		1.03623	0.00195	0.72	1.03710	0.00256	1.01
K82PZ6		1.03467	0.00038	0.14	1.03467	0.00012	0.05
KLMX4X		1.03490	0.00061	0.23	1.03460	0.00006	0.02
KTGCFH		1.03367	-0.00062	-0.23	1.03267	-0.00188	-0.74
L323FF	X	1.03830	0.00401	1.48	1.03447	-0.00008	-0.03
M2A7QL		1.03320	-0.00109	-0.40	1.03260	-0.00194	-0.77
NDV334		1.03500	0.00071	0.26	1.03433	-0.00021	-0.08
NHBBQ3		1.03327	-0.00102	-0.38	1.03230	-0.00224	-0.89
NHPW3Q		1.03133	-0.00295	-1.09	1.03400	-0.00054	-0.21
NJM6BA	*	1.03200	-0.00229	-0.85	1.03533	0.00079	0.31
P3UTHZ		1.03627	0.00198	0.73	1.03780	0.00326	1.29
P6H7ZH	*	1.03733	0.00305	1.13	1.03400	-0.00054	-0.21
P9HHWH		1.03327	-0.00102	-0.38	1.03273	-0.00181	-0.71
PH6JCR		1.03587	0.00158	0.59	1.03650	0.00195	0.77
PYTTYU		1.03697	0.00268	0.99	1.03660	0.00206	0.81
QCT32U		1.02910	-0.00519	-1.92	1.03193	-0.00261	-1.03
QJBKBV		1.03667	0.00238	0.88	1.03733	0.00279	1.10
RD74FF		1.03000	-0.00429	-1.58	1.03000	-0.00454	-1.79
RK8B3V	X	1.03337	-0.00092	-0.34	1.03767	0.00312	1.23
T4WY3P		1.03790	0.00361	1.34	1.03790	0.00336	1.33
TKFP2P		1.03300	-0.00129	-0.48	1.03337	-0.00118	-0.46
TQ9WKX		1.03790	0.00361	1.34	1.03790	0.00336	1.33
U3X8AF		1.03567	0.00138	0.51	1.03433	-0.00021	-0.08
UBA84R		1.03403	-0.00025	-0.09	1.03360	-0.00094	-0.37
UD27HP		1.03613	0.00185	0.68	1.03703	0.00249	0.98
UGZGDP		1.03197	-0.00232	-0.86	1.03230	-0.00224	-0.89
UKGZGT		1.03500	0.00071	0.26	1.03533	0.00079	0.31
UYFQEQQ		1.03460	0.00031	0.12	1.03697	0.00242	0.96
VKUX4N		1.03713	0.00285	1.05	1.03643	0.00189	0.75
VXHZLG		1.03247	-0.00182	-0.67	1.03310	-0.00144	-0.57



Plastics Interlaboratory Testing Program

Analysis 718

Specific Gravity - sp gr 23/23 C

Report #130

2nd Qtr 2024

WebCode	Data Flag	Sample T01			Sample T02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
W3AGJT		1.03687	0.00258	0.95	1.03657	0.00202	0.80
WDQBNU		1.03300	-0.00129	-0.48	1.03267	-0.00188	-0.74
X3PZ4Q		1.03773	0.00345	1.27	1.03777	0.00322	1.27
XE2DBT	*	1.03400	-0.00029	-0.11	1.03150	-0.00304	-1.20
XQB4YL	X	1.04763	0.01335	4.93	1.04823	0.01369	5.40
XV6A9H		1.03300	-0.00129	-0.48	1.03537	0.00082	0.33
YD2RZY		1.03200	-0.00229	-0.85	1.03200	-0.00254	-1.00
YD3KZR		1.03693	0.00265	0.98	1.03663	0.00209	0.83
YTDBVJ		1.03600	0.00171	0.63	1.03700	0.00246	0.97
YVJTTF		1.03100	-0.00329	-1.22	1.03033	-0.00421	-1.66
Z96D2F		1.02810	-0.00619	-2.29	1.02867	-0.00588	-2.32
ZCYLUN		1.03647	0.00218	0.81	1.03663	0.00209	0.83

Summary Statistics		Sample T01	Sample T02
Grand Means		1.034287 sp gr 23/23 C	1.034542 sp gr 23/23 C
Stnd Dev Btwn Labs		0.002705 sp gr 23/23 C	0.002533 sp gr 23/23 C

Statistics based on 78 of 82 reporting participants

Sample T01: HIPS & Sample T02: HIPS

Comments on Assigned Data Flags for Test #718

- XQB4YL (X) - Data for both samples are high. Possible Systematic Error.
- RK8B3V (X) - Inconsistent in testing between samples.
- CJLDB6 (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of both samples.
- L323FF (X) - Inconsistent in testing between samples.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample T01 HIPS			Sample T02 HIPS			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
ASTM D792 Method A (water)	1.034742	0.002620	0.000	1.035001	0.002498	0.000	56/58
ASTM D792 Method B (not water)	1.034900	0.000000	0.001	1.034600	0.000000	0.000	1/2
ASTM D1505	1.036933	0.000000	0.003	1.036633	0.000000	0.002	1/1
ISO 1183	1.032848	0.002571	-0.001	1.033150	0.002248	-0.001	20/21



Plastics Interlaboratory Testing Program

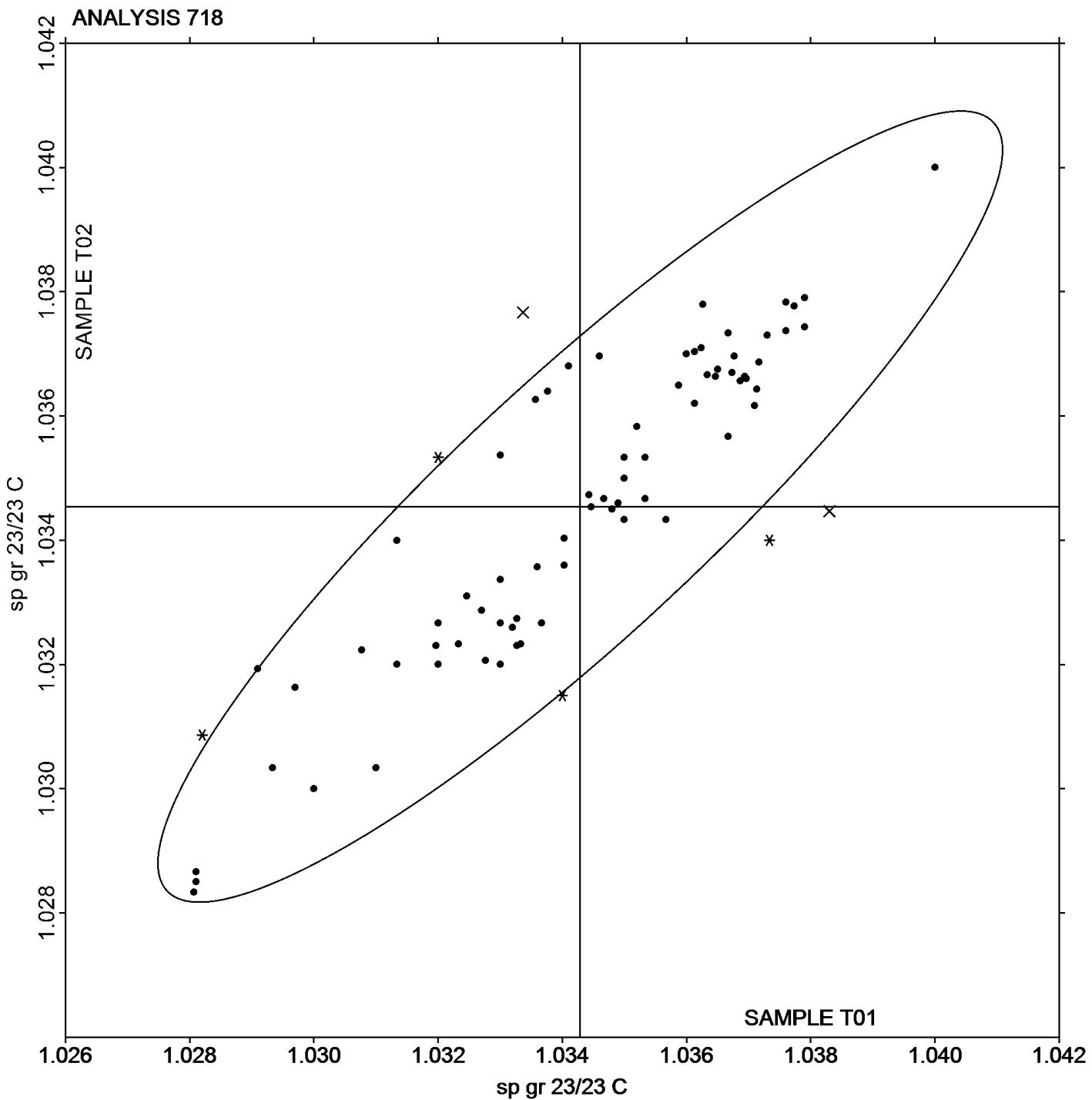
Report #130

Analysis 718

2nd Qtr 2024

Specific Gravity - sp gr 23/23 C

Grand Mean Sample T01: 1.0343 sp gr 23/23 C Grand Mean Sample T02: 1.0345 sp gr 23/23 C





Plastics Interlaboratory Testing Program

Analysis 720

Report #130

2nd Qtr 2024

Flexural Modulus- ksi

WebCode	Data Flag	Sample J01			Sample J02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
24MPR3		322.2	-23.7	-1.06	328.8	-16.6	-0.73
2NAEZA		388.8	43.0	1.93	380.0	34.6	1.51
36E6FJ		348.1	2.2	0.10	349.3	3.9	0.17
3RP9DL		362.0	16.1	0.72	360.6	15.1	0.66
4D9J6B		354.6	8.7	0.39	354.8	9.4	0.41
7C6PAB		352.4	6.5	0.29	355.4	10.0	0.44
823Q22		343.0	-2.9	-0.13	342.6	-2.8	-0.12
8E7C26		363.3	17.4	0.78	360.8	15.4	0.68
8EPZLK		361.6	15.7	0.71	358.0	12.6	0.55
8WLJD2		307.2	-38.7	-1.73	305.2	-40.2	-1.76
9CZXJ7		366.4	20.5	0.92	361.1	15.7	0.69
A8U6CC		323.0	-22.9	-1.03	322.5	-23.0	-1.01
ALFKFC		350.8	5.0	0.22	350.6	5.2	0.23
AU9T23		351.8	5.9	0.27	351.2	5.8	0.25
BD3LUD		372.1	26.2	1.17	370.5	25.0	1.10
BF9ZH8		380.1	34.3	1.54	382.9	37.4	1.64
BQQLLF		346.4	0.6	0.03	347.7	2.3	0.10
CWAFTX		323.6	-22.2	-1.00	323.3	-22.1	-0.97
DJJ4UT		326.4	-19.5	-0.87	326.2	-19.2	-0.84
DQGV3M		303.0	-42.8	-1.92	302.9	-42.5	-1.86
E4NUYZ		358.3	12.4	0.56	358.4	13.0	0.57
FXQUT4		346.7	0.9	0.04	347.5	2.0	0.09
GJ8GAG		367.1	21.3	0.95	370.3	24.9	1.09
KV9BUG		331.2	-14.7	-0.66	335.2	-10.2	-0.45
M2A7QL		341.6	-4.3	-0.19	333.3	-12.1	-0.53
M8AQKV		337.7	-8.2	-0.37	330.3	-15.1	-0.66
NDV334		322.3	-23.6	-1.06	323.4	-22.0	-0.96
NGX2DW		367.2	21.3	0.96	363.4	18.0	0.79
NHBBQ3		365.8	20.0	0.90	366.6	21.1	0.93
P3UTHZ		362.3	16.4	0.74	360.3	14.9	0.65
P6H7ZH	*	401.0	55.1	2.47	410.6	65.2	2.85
PYTTYU		350.0	4.1	0.18	349.7	4.3	0.19
T6NURJ		324.2	-21.6	-0.97	323.5	-21.9	-0.96
TMLARB		315.5	-30.4	-1.36	313.6	-31.8	-1.39
TQTJ8M		339.6	-6.3	-0.28	346.9	1.5	0.06



Plastics Interlaboratory Testing Program

Analysis 720

Report #130

2nd Qtr 2024

Flexural Modulus- ksi

WebCode	Data Flag	Sample J01			Sample J02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
U3X8AF		332.4	-13.5	-0.60	329.4	-16.0	-0.70
UGZGDP	*	356.5	10.6	0.47	371.2	25.8	1.13
W38WND		335.1	-10.7	-0.48	334.9	-10.5	-0.46
WFGCW3		348.3	2.4	0.11	348.1	2.7	0.12
X3PZ4Q	*	371.5	25.6	1.15	358.4	13.0	0.57
XMB2NR	M	No data reported for this sample			347.0	1.6	0.07
XQB4YL		323.2	-22.6	-1.01	311.3	-34.1	-1.50
YD3KZR		349.3	3.5	0.16	344.0	-1.4	-0.06
YTDBVJ		335.1	-10.7	-0.48	337.7	-7.7	-0.34
YTRW6L		335.5	-10.4	-0.47	341.3	-4.1	-0.18
Z96D2F		291.1	-54.8	-2.46	291.0	-54.4	-2.38
ZCYLUN		354.6	8.7	0.39	354.6	9.2	0.40

Summary Statistics	Sample J01	Sample J02
Grand Means	345.87 ksi	345.42 ksi
Stnd Dev Btwn Labs	22.30 ksi	22.84 ksi

Statistics based on 46 of 47 reporting participants

Sample J01: HIPS & Sample J02: HIPS

Comments on Assigned Data Flags for Test #720

XMB2NR (M) - Participant did not submit data for sample J01.



Plastics Interlaboratory Testing Program

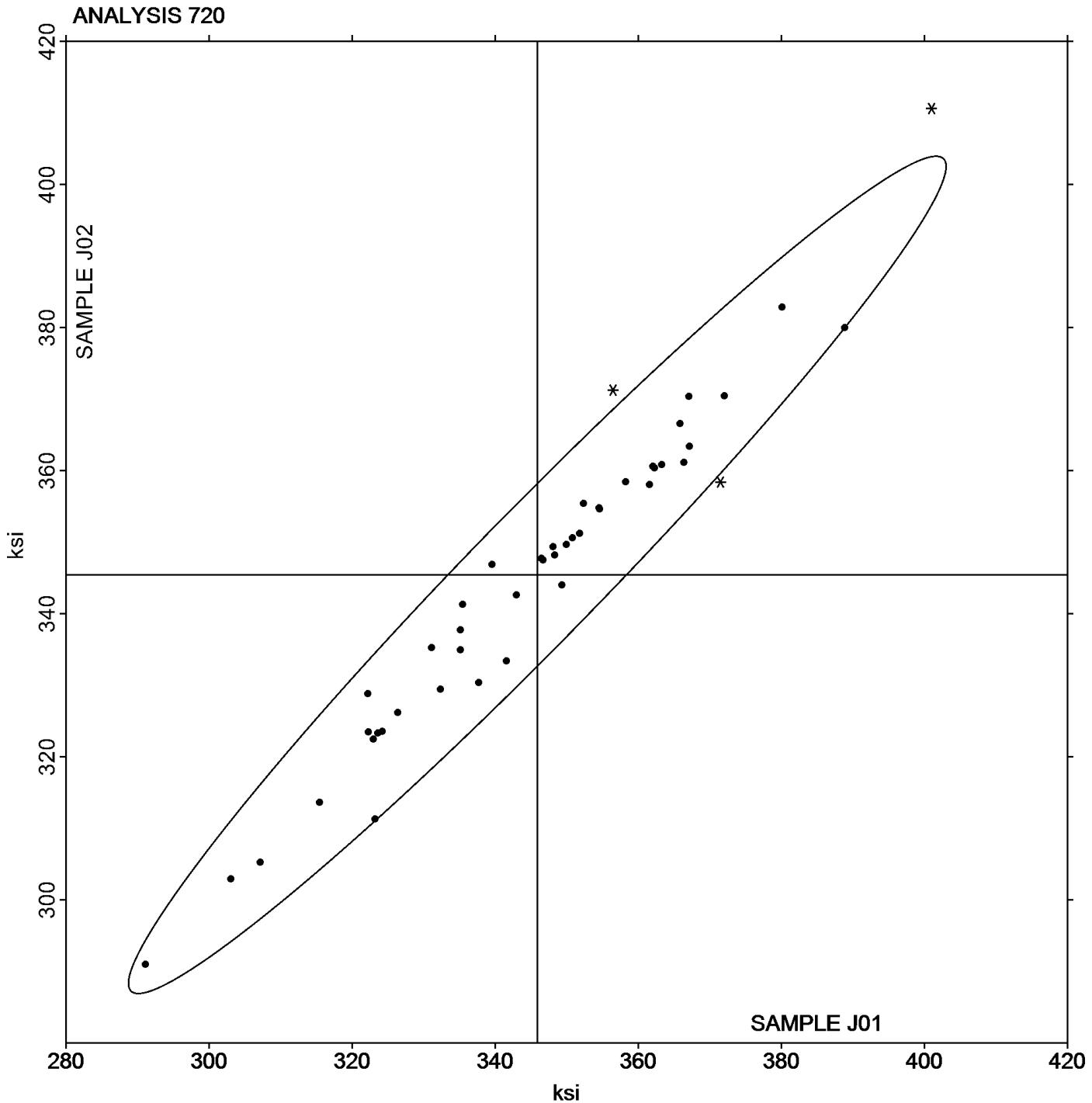
Analysis 720

Flexural Modulus- ksi

Report #130

2nd Qtr 2024

Grand Mean Sample J01: 345.87 ksi Grand Mean Sample J02: 345.42 ksi





Plastics Interlaboratory Testing Program

Analysis 721

Report #130

2nd Qtr 2024

Flexural Stress at 5% Strain - psi

WebCode	Data Flag	Sample J01			Sample J02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
24MPR3		6,462	124	0.47	6,454	108	0.39
2NAEZA		6,935	596	2.27	6,850	503	1.82
36E6FJ		6,330	-9	-0.03	6,362	15	0.05
4D9J6B		6,188	-150	-0.57	6,252	-95	-0.34
7C6PAB		6,889	551	2.10	6,925	578	2.09
823Q22		6,280	-58	-0.22	6,472	125	0.45
8E7C26		6,872	534	2.03	6,788	442	1.59
8EPZLK		6,086	-252	-0.96	6,081	-266	-0.96
8WLJD2		6,214	-124	-0.47	6,246	-101	-0.36
ALFKFC		6,694	356	1.36	6,843	496	1.79
AU9T23		6,901	563	2.15	6,857	510	1.84
BD3LUD		6,347	8	0.03	6,399	53	0.19
BF9ZH8		6,360	22	0.08	6,354	7	0.03
BQQLLF		6,412	74	0.28	6,464	118	0.43
CWAFTX		6,156	-182	-0.69	6,156	-191	-0.69
DJJ4UT		5,853	-485	-1.85	5,862	-485	-1.75
DQGV3M		5,946	-392	-1.49	6,019	-327	-1.18
E4NUYZ		6,428	90	0.34	6,420	73	0.26
FXQUT4		6,382	43	0.17	6,382	35	0.13
GJ8GAG		6,226	-113	-0.43	6,029	-317	-1.14
KV9BUG		6,265	-73	-0.28	6,288	-58	-0.21
M2A7QL		6,213	-126	-0.48	6,187	-159	-0.58
M8AQQV		6,415	77	0.29	6,388	41	0.15
N97GHW	*	6,164	-174	-0.66	5,918	-428	-1.55
NDV334		6,158	-180	-0.69	6,195	-151	-0.55
NGX2DW		6,453	115	0.44	6,608	261	0.94
NHBBQ3		6,392	54	0.21	6,409	62	0.22
P3UTHZ		6,280	-58	-0.22	6,323	-24	-0.09
PYTTYU		6,422	84	0.32	6,396	50	0.18
T6NURJ		6,008	-331	-1.26	6,025	-322	-1.16
TMLARB		5,899	-439	-1.67	5,892	-455	-1.64
TQTJ8M		6,085	-253	-0.96	6,037	-309	-1.12
U3X8AF		6,243	-95	-0.36	6,259	-88	-0.32
UGZGDP		6,369	31	0.12	6,575	229	0.83
W38WND		6,564	226	0.86	6,559	212	0.77



Plastics Interlaboratory Testing Program

Analysis 721

Report #130

2nd Qtr 2024

Flexural Stress at 5% Strain - psi

WebCode	Data Flag	Sample J01			Sample J02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
X3PZ4Q	X	6,493	155	0.59	6,077	-269	-0.97
XMB2NR	M	No data reported for this sample			6,351	5	0.02
XQB4YL		6,235	-104	-0.39	6,050	-296	-1.07
YTDBVJ		6,572	234	0.89	6,629	283	1.02
YTRW6L		6,120	-219	-0.83	6,222	-125	-0.45
Z96D2F		6,373	35	0.13	6,342	-4	-0.02

Summary Statistics

Sample J01

Sample J02

Grand Means

6,338.2 psi

6,346.6 psi

Stnd Dev Btwn Labs

262.5 psi

277.0 psi

Statistics based on 39 of 41 reporting participants

Sample J01: HIPS & Sample J02: HIPS

Comments on Assigned Data Flags for Test #721

X3PZ4Q (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.

XMB2NR (M) - Participant did not submit data for sample J01.



Plastics Interlaboratory Testing Program

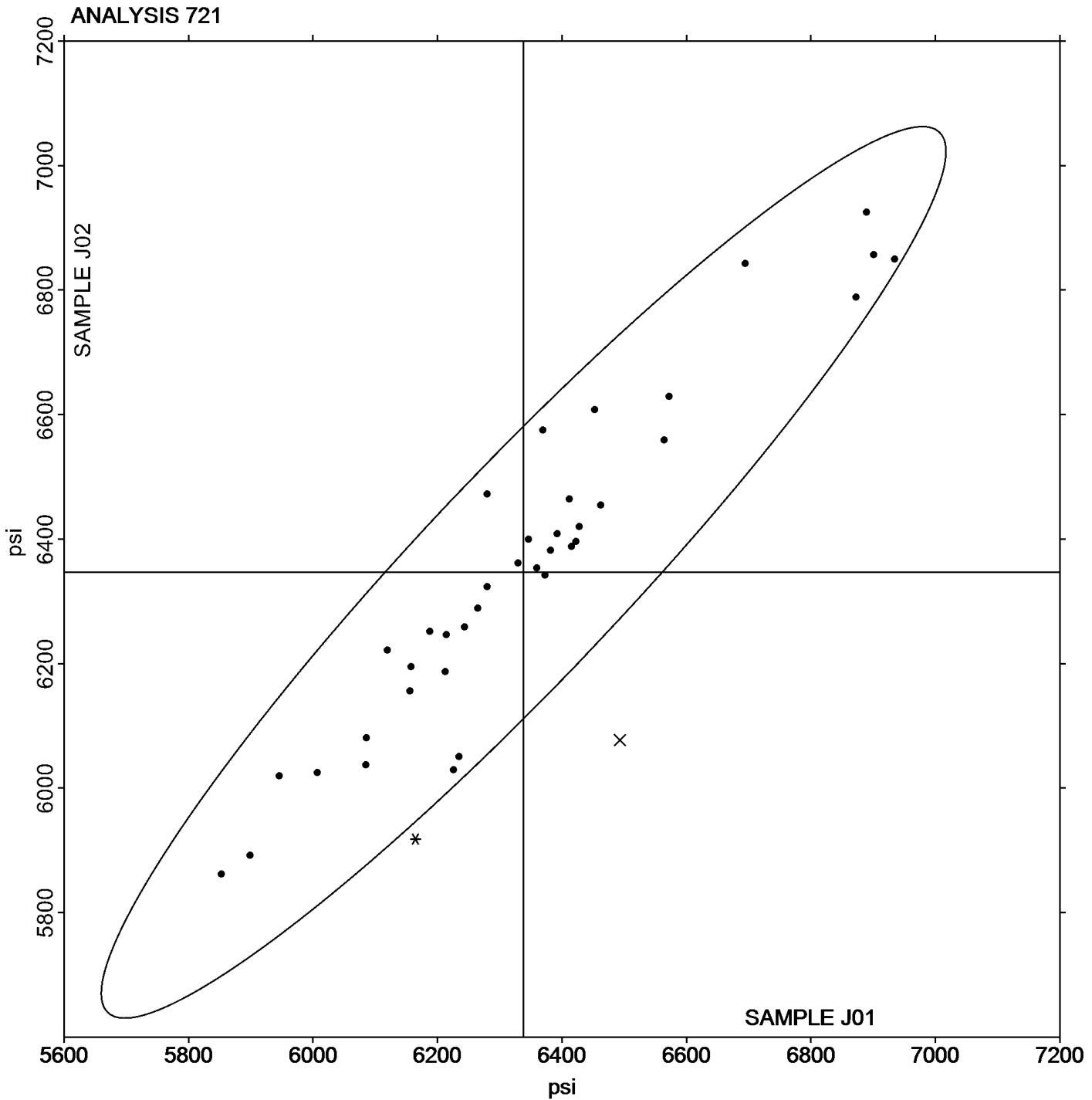
Analysis 721

Report #130

2nd Qtr 2024

Flexural Stress at 5% Strain - psi

Grand Mean Sample J01: 6,338.25 psi Grand Mean Sample J02: 6,346.61 psi





Plastics Interlaboratory Testing Program

Analysis 722

Report #130

2nd Qtr 2024

Flexural Stress at Yield - psi

WebCode	Data Flag	Sample J01			Sample J02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
24MPR3		6,494	215	0.50	6,490	211	0.49
2NAEZA		6,993	714	1.65	6,925	646	1.51
36E6FJ		6,373	94	0.22	6,431	152	0.36
4D9J6B		6,257	-22	-0.05	6,319	40	0.09
7C6PAB		6,838	559	1.29	6,859	580	1.35
8E7C26		6,872	593	1.37	6,788	510	1.19
8EPZLK		6,411	132	0.31	6,389	110	0.26
8WLJD2		6,270	-9	-0.02	6,322	43	0.10
A8U6CC		6,297	18	0.04	6,310	31	0.07
ALFKFC		6,722	443	1.02	6,876	597	1.39
AU9T23		6,935	656	1.52	6,889	610	1.42
BD3LUD		6,287	8	0.02	6,316	38	0.09
BF9ZH8		6,382	103	0.24	6,377	98	0.23
BQQLLF		6,508	229	0.53	6,533	255	0.59
CWAFTX		6,155	-124	-0.29	6,153	-125	-0.29
DJJ4UT		5,860	-419	-0.97	5,870	-409	-0.95
DQGV3M	*	4,961	-1,318	-3.05	4,998	-1,281	-2.99
FXQUT4		6,382	103	0.24	6,382	103	0.24
GJ8GAG		6,259	-20	-0.05	6,093	-186	-0.43
KV9BUG		6,396	117	0.27	6,369	91	0.21
M8AQKV		6,447	168	0.39	6,441	163	0.38
N97GHW		5,168	-1,111	-2.57	5,196	-1,083	-2.53
NDV334		6,164	-115	-0.27	6,199	-80	-0.19
NHBBQ3		6,394	115	0.27	6,407	129	0.30
P3UTHZ		6,284	5	0.01	6,327	48	0.11
TMLARB		5,929	-350	-0.81	5,915	-364	-0.85
TQTJ8M		6,088	-191	-0.44	6,103	-176	-0.41
W38WND		5,493	-786	-1.82	5,488	-791	-1.84
WFGCW3		6,319	40	0.09	6,295	16	0.04
X3PZ4Q	*	6,319	40	0.09	6,110	-169	-0.39
XMB2NR	M	No data reported for this sample			6,261	-17	-0.04
XQB4YL		6,326	47	0.11	6,214	-65	-0.15
YTDBVJ		6,669	390	0.90	6,784	506	1.18
YTRW6L		5,824	-455	-1.05	5,905	-374	-0.87
Z96D2F		6,474	195	0.45	6,432	153	0.36



Plastics Interlaboratory Testing Program

Analysis 722

Report #130

2nd Qtr 2024

Flexural Stress at Yield - psi

WebCode	Data Flag	Sample J01			Sample J02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
ZCYLUN		6,213	-66	-0.15	6,245	-33	-0.08
Summary Statistics							
Grand Means							
Sample J01				Sample J02			
6,279.0 psi				6,278.5 psi			
Stnd Dev Btwn Labs				432.6 psi			
428.6 psi							
Statistics based on 35 of 36 reporting participants							

Sample J01: HIPS & Sample J02: HIPS

Comments on Assigned Data Flags for Test #722

XMB2NR (M) - Participant did not submit data for sample J01.



Plastics Interlaboratory Testing Program

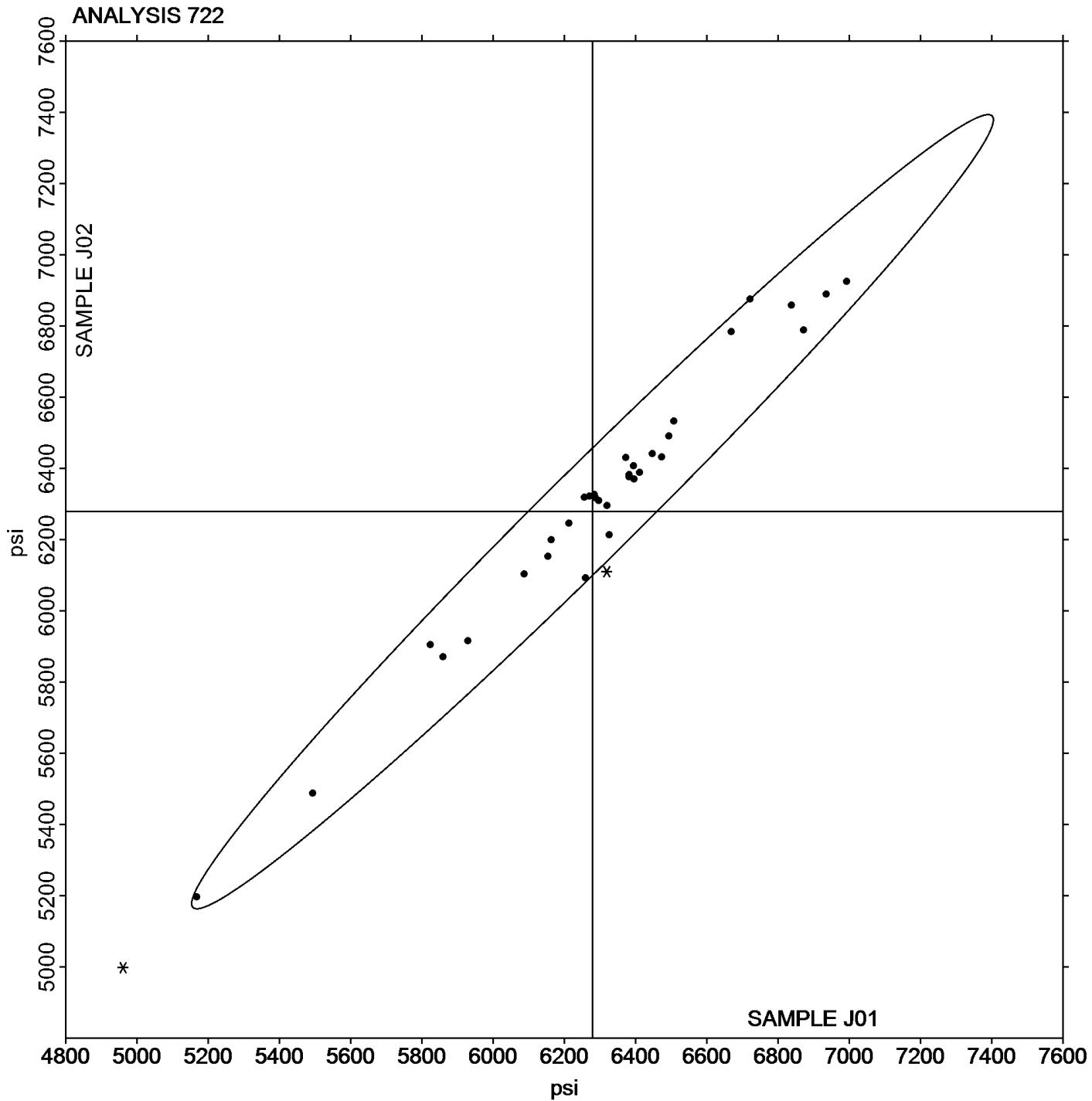
Analysis 722

Flexural Stress at Yield - psi

Report #130

2nd Qtr 2024

Grand Mean Sample J01: 6,278.97 psi Grand Mean Sample J02: 6,278.50 psi





Plastics Interlaboratory Testing Program

Analysis 730

Report #130

2nd Qtr 2024

Tensile Stress at Yield - MPa

WebCode	Data Flag	Sample C01			Sample C02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2Q2AN4		26.59	0.13	0.20	26.44	0.02	0.04
36E6FJ	*	27.61	1.16	1.71	27.91	1.49	2.29
384ACW		27.27	0.82	1.21	27.31	0.89	1.37
3RP9DL		25.61	-0.85	-1.26	25.63	-0.79	-1.22
8FX9QY	X	24.52	-1.94	-2.86	22.23	-4.19	-6.48
9CZXJ7		26.42	-0.04	-0.05	26.24	-0.18	-0.28
9ND2NG		25.25	-1.20	-1.78	25.50	-0.92	-1.42
9P3F7Y		26.04	-0.42	-0.62	26.23	-0.19	-0.30
A8U6CC		27.18	0.72	1.07	27.02	0.60	0.93
BEA4KW		26.35	-0.10	-0.15	26.04	-0.38	-0.59
BMRC9T	*	26.63	0.17	0.25	27.11	0.69	1.06
CGUHLC		25.90	-0.56	-0.82	25.80	-0.62	-0.96
CNWEFA		26.34	-0.12	-0.17	26.62	0.20	0.31
CPE7RE	*	28.20	1.74	2.57	27.88	1.46	2.25
CWAFTX		26.39	-0.07	-0.10	26.20	-0.22	-0.34
DJJ4UT		27.23	0.77	1.14	27.11	0.69	1.06
DVUFA9		26.86	0.40	0.59	26.64	0.22	0.34
EVQ829		26.13	-0.33	-0.48	26.01	-0.41	-0.64
EYPHW9		26.35	-0.10	-0.15	26.47	0.05	0.07
H3HPMM		26.70	0.24	0.36	26.81	0.39	0.61
J4K8W3		27.53	1.08	1.59	27.16	0.74	1.15
JLNKUJ		26.90	0.44	0.65	27.04	0.62	0.96
JQGNL3	X	24.83	-1.63	-2.40	25.51	-0.91	-1.40
KLMX4X		26.84	0.38	0.56	26.65	0.23	0.36
KQGWB2		26.60	0.14	0.21	26.59	0.17	0.27
L2CPWX		27.02	0.56	0.83	27.06	0.64	0.98
L323FF		26.32	-0.14	-0.20	26.38	-0.04	-0.06
L8ENL2		27.11	0.65	0.97	26.90	0.48	0.74
M2A7QL		25.71	-0.75	-1.11	25.59	-0.83	-1.28
M8AQQV		26.47	0.01	0.02	26.43	0.01	0.01
N6PXET		26.86	0.40	0.59	26.86	0.44	0.68
NAVR84		26.56	0.10	0.15	26.65	0.23	0.35
NDV334		26.83	0.38	0.56	26.81	0.39	0.61
NHBBQ3		26.64	0.18	0.26	26.59	0.17	0.27
NHPW3Q		26.81	0.35	0.52	26.47	0.05	0.08



Plastics Interlaboratory Testing Program

Analysis 730

Report #130

2nd Qtr 2024

Tensile Stress at Yield - MPa

WebCode	Data Flag	Sample C01			Sample C02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
NJM6BA		25.94	-0.52	-0.76	25.98	-0.44	-0.68
NM7BVQ		25.88	-0.58	-0.85	25.46	-0.96	-1.48
P3UTHZ		25.60	-0.86	-1.27	25.46	-0.96	-1.49
P6H7ZH		25.44	-1.02	-1.50	25.44	-0.98	-1.51
P9HHWH		26.34	-0.12	-0.18	26.43	0.01	0.02
PCKF8B	X	24.42	-2.04	-3.01	24.14	-2.28	-3.52
PYTTYU		26.32	-0.14	-0.20	26.17	-0.25	-0.38
QCEJHW		27.16	0.70	1.04	27.22	0.80	1.24
QCT32U	X	21.60	-4.86	-7.17	21.44	-4.98	-7.69
RD74FF		26.45	-0.01	-0.01	26.51	0.09	0.14
RK8B3V		25.74	-0.72	-1.06	26.00	-0.42	-0.65
TQ9WKX		27.74	1.28	1.89	27.48	1.06	1.64
TRYVXW		26.20	-0.26	-0.38	26.12	-0.30	-0.46
U93P6V		25.17	-1.29	-1.91	25.18	-1.24	-1.91
UBA84R		26.91	0.45	0.67	26.94	0.52	0.81
UD27HP	*	24.48	-1.98	-2.92	24.86	-1.56	-2.41
UKGZGT		26.03	-0.42	-0.62	25.94	-0.48	-0.74
WDQBNU		26.12	-0.34	-0.49	26.09	-0.33	-0.51
WTKV83		26.15	-0.31	-0.46	26.09	-0.33	-0.51
X3PZ4Q		27.38	0.93	1.37	27.44	1.02	1.57
XANR48		26.14	-0.32	-0.47	26.05	-0.37	-0.57
XE2DBT		26.08	-0.38	-0.56	26.10	-0.32	-0.49
YD3KZR	*	26.77	0.31	0.46	26.15	-0.27	-0.42
YTDBVJ		26.06	-0.40	-0.59	26.04	-0.38	-0.59
YVJTTF		26.25	-0.21	-0.31	26.22	-0.20	-0.32

Summary Statistics	Sample C01	Sample C02
Grand Means	26.457 MPa	26.420 MPa
Stnd Dev Btwn Labs	0.677 MPa	0.647 MPa

Statistics based on 56 of 60 reporting participants

Sample C01: HIPS & Sample C02: HIPS



Plastics Interlaboratory Testing Program
Analysis 730
Tensile Stress at Yield - MPa

Report #130
2nd Qtr 2024

Comments on Assigned Data Flags for Test #730

- QCT32U (X) - Data for both samples are low. Possible Systematic Error.
- JQGNL3 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample C01.
- PCKF8B (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample C02.
- 8FX9QY (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of both samples.



Plastics Interlaboratory Testing Program

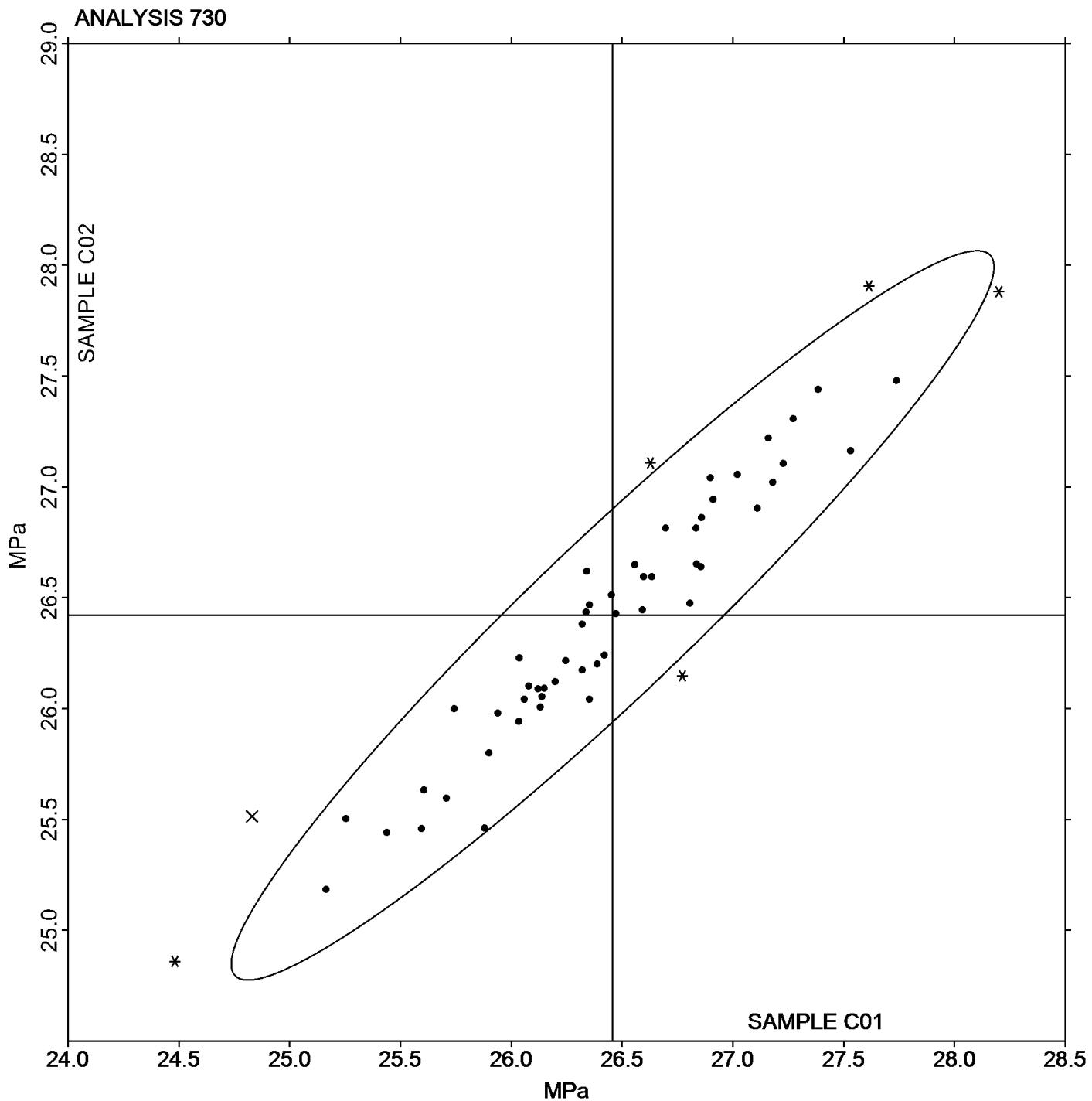
Analysis 730

Tensile Stress at Yield - MPa

Report #130

2nd Qtr 2024

Grand Mean Sample C01: 26.457 MPa Grand Mean Sample C02: 26.420 MPa





Plastics Interlaboratory Testing Program

Report #130

Analysis 731

2nd Qtr 2024

Tensile Stress at Break - MPa

WebCode	Data Flag	Sample C01			Sample C02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2Q2AN4		21.65	0.38	0.49	21.65	0.48	0.65
36E6FJ		22.31	1.03	1.36	22.48	1.31	1.77
384ACW		21.56	0.28	0.37	21.17	-0.01	-0.01
8FX9QY		20.27	-1.01	-1.32	20.15	-1.03	-1.39
9ND2NG		21.32	0.05	0.06	21.40	0.23	0.31
BEA4KW	X	26.35	5.08	6.67	26.04	4.87	6.58
BMRC9T		21.39	0.11	0.15	21.86	0.69	0.93
CGUHLC		20.40	-0.88	-1.15	20.24	-0.93	-1.26
CNWEFA	X	15.30	-5.98	-7.85	15.46	-5.71	-7.72
CPE7RE		22.60	1.32	1.74	22.44	1.27	1.71
CWAFTX	*	21.30	0.02	0.03	20.36	-0.81	-1.10
DJJ4UT		21.75	0.47	0.62	21.79	0.62	0.84
DVUFA9		21.65	0.38	0.49	21.60	0.42	0.57
EVQ829		21.48	0.20	0.26	21.30	0.12	0.16
EYPHW9		21.70	0.43	0.56	21.62	0.44	0.60
H3HPMM		21.54	0.26	0.35	21.42	0.25	0.33
J4K8W3		21.97	0.69	0.91	21.48	0.31	0.42
JLNKUJ		21.64	0.36	0.47	21.79	0.61	0.83
JQGNL3		19.75	-1.53	-2.01	20.14	-1.03	-1.39
KLMX4X		22.06	0.78	1.03	21.63	0.46	0.62
KQGWB2		21.04	-0.23	-0.31	21.05	-0.13	-0.17
L2CPWX		21.57	0.30	0.39	21.52	0.34	0.46
L323FF		20.97	-0.31	-0.40	20.36	-0.81	-1.09
L8ENL2	X	19.86	-1.41	-1.86	21.36	0.19	0.25
M2A7QL		21.26	-0.01	-0.02	20.60	-0.57	-0.78
M8AQQV		21.67	0.40	0.52	21.65	0.48	0.65
N6PXET		20.33	-0.95	-1.24	20.92	-0.25	-0.34
NAVR84		20.73	-0.54	-0.71	21.33	0.16	0.21
NDV334		21.64	0.37	0.48	21.41	0.24	0.32
NHBBQ3		21.39	0.12	0.15	21.12	-0.05	-0.07
NHPW3Q	X	21.01	-0.27	-0.36	18.50	-2.68	-3.62
NJM6BA	X	19.74	-1.54	-2.02	20.88	-0.29	-0.40
NM7BVQ		20.78	-0.50	-0.65	20.00	-1.17	-1.59
P3UTHZ		20.37	-0.90	-1.19	20.49	-0.68	-0.92
P9HHWH		21.15	-0.12	-0.16	21.22	0.05	0.06



Plastics Interlaboratory Testing Program

Analysis 731

Report #130

2nd Qtr 2024

Tensile Stress at Break - MPa

WebCode	Data Flag	Sample C01			Sample C02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
PCKF8B		19.66	-1.62	-2.12	20.13	-1.04	-1.41
PYTTYU		21.34	0.06	0.08	21.17	0.00	0.00
QCEJHW		21.42	0.14	0.19	21.56	0.39	0.52
QCT32U	X	18.72	-2.56	-3.36	17.60	-3.57	-4.83
RD74FF		21.59	0.31	0.41	21.23	0.06	0.08
RK8B3V		20.60	-0.68	-0.89	20.47	-0.71	-0.95
TQ9WKX		22.52	1.24	1.63	22.32	1.15	1.55
TRYVXW		20.56	-0.72	-0.94	20.64	-0.53	-0.72
U93P6V		20.16	-1.12	-1.47	19.72	-1.45	-1.97
UD27HP		20.04	-1.23	-1.62	20.50	-0.67	-0.91
UKGZGT		21.70	0.43	0.56	21.80	0.63	0.85
WTKV83		20.55	-0.72	-0.95	20.57	-0.61	-0.82
X3PZ4Q	*	23.62	2.35	3.08	23.51	2.33	3.15
XANR48		21.33	0.06	0.08	21.19	0.02	0.02
XE2DBT		20.96	-0.32	-0.42	20.66	-0.51	-0.69
YD3KZR		21.29	0.01	0.02	20.83	-0.34	-0.46
YTDBVJ		21.92	0.64	0.85	21.54	0.37	0.49
YVJTTF		21.46	0.18	0.24	21.12	-0.05	-0.07

Summary Statistics

Sample C01

Sample C02

Grand Means

21.277 MPa

21.174 MPa

Stnd Dev Btwn Labs

0.761 MPa

0.740 MPa

Statistics based on 47 of 53 reporting participants

Sample C01: HIPS & Sample C02: HIPS

Comments on Assigned Data Flags for Test #731

- QCT32U (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample C01.
- CNWEFA (X) - Data for both samples are low. Possible Systematic Error.
- L8ENL2 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample C01.
- BEA4KW (X) - Data for both samples are high. Possible Systematic Error.
- NHPW3Q (X) - Data for sample C02 are low. Inconsistent within the determinations of sample C02.
- NJM6BA (X) - Inconsistent in testing between samples.



Plastics Interlaboratory Testing Program

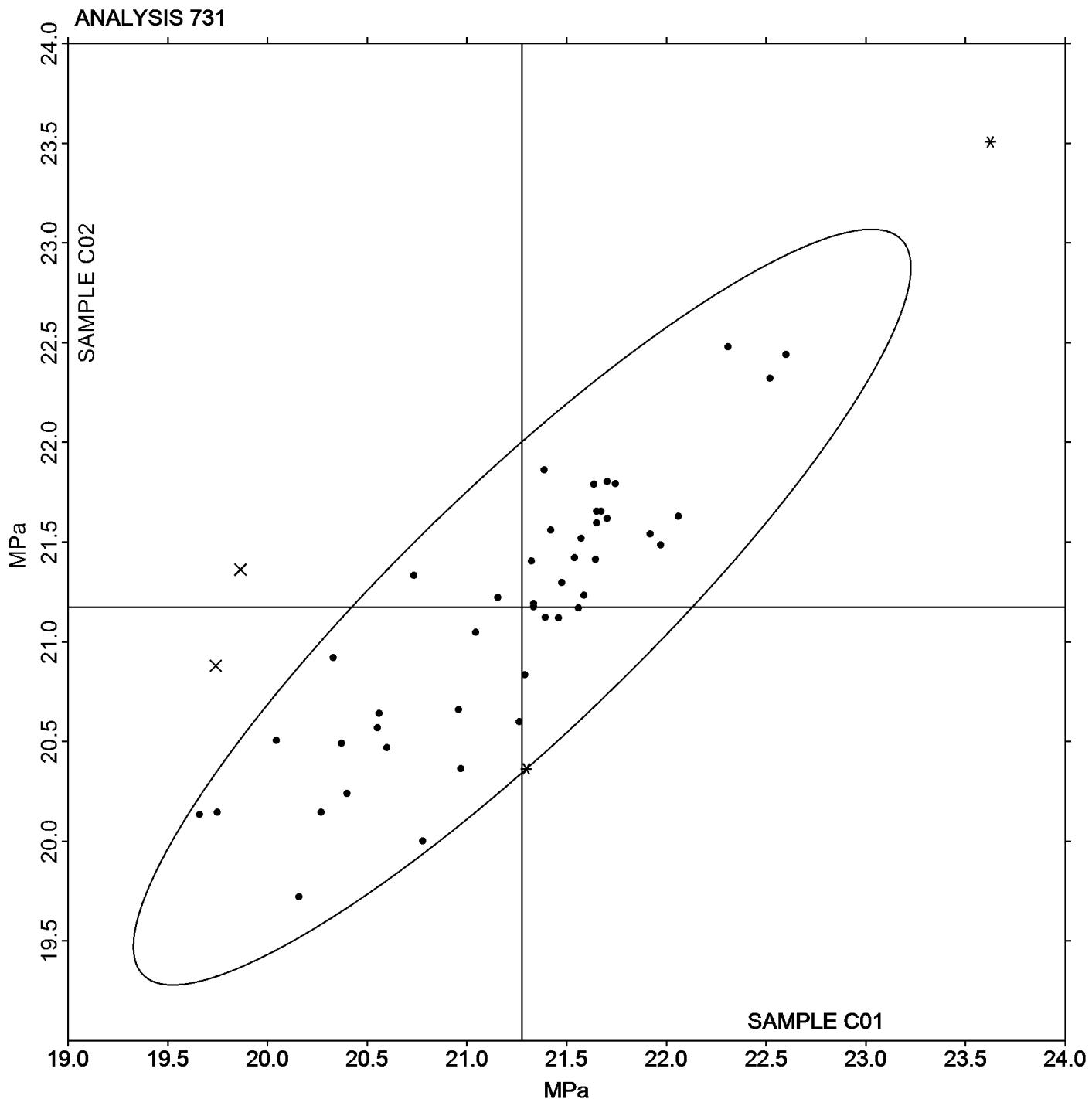
Analysis 731

Report #130

2nd Qtr 2024

Tensile Stress at Break - MPa

Grand Mean Sample C01: 21.277 MPa Grand Mean Sample C02: 21.174 MPa





Plastics Interlaboratory Testing Program

Analysis 732

Report #130

2nd Qtr 2024

Percent Strain at Yield

WebCode	Data Flag	Sample C01			Sample C02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2Q2AN4		1.298	-0.006	-0.11	1.290	-0.013	-0.22
384ACW		1.350	0.046	0.81	1.352	0.049	0.81
8FX9QY	X	1.068	-0.236	-4.16	1.020	-0.283	-4.74
9ND2NG	*	1.152	-0.152	-2.68	1.162	-0.141	-2.36
A8U6CC		1.324	0.020	0.35	1.324	0.021	0.34
BEA4KW		1.255	-0.049	-0.86	1.278	-0.025	-0.42
BMRC9T	*	1.428	0.124	2.18	1.466	0.163	2.72
CGUHLC		1.408	0.104	1.83	1.400	0.097	1.61
CNWEFA	X	1.000	-0.304	-5.36	1.000	-0.303	-5.07
CPE7RE		1.360	0.056	0.99	1.380	0.077	1.28
CWAFTX		1.300	-0.004	-0.07	1.302	-0.001	-0.02
DJJ4UT		1.282	-0.022	-0.39	1.264	-0.039	-0.66
DVUFA9	*	1.350	0.046	0.81	1.306	0.003	0.04
EVQ829		1.274	-0.030	-0.53	1.266	-0.037	-0.62
EYPHW9		1.378	0.074	1.30	1.388	0.085	1.42
H3HPMM		1.300	-0.004	-0.07	1.300	-0.003	-0.06
J4K8W3		1.282	-0.022	-0.39	1.282	-0.021	-0.35
JLNKUJ		1.400	0.096	1.69	1.404	0.101	1.68
JQGNL3	X	1.968	0.664	11.70	1.620	0.316	5.28
KLMX4X		1.326	0.022	0.39	1.292	-0.011	-0.19
KQGWB2		1.318	0.014	0.25	1.328	0.025	0.41
L2CPWX		1.414	0.110	1.93	1.397	0.093	1.56
L323FF		1.255	-0.049	-0.86	1.260	-0.043	-0.72
L8ENL2		1.336	0.032	0.56	1.320	0.017	0.28
M2A7QL		1.258	-0.046	-0.81	1.272	-0.031	-0.52
M8AQQV		1.318	0.014	0.25	1.310	0.007	0.11
N6PXET		1.378	0.074	1.30	1.378	0.075	1.25
NAVR84		1.276	-0.028	-0.49	1.280	-0.023	-0.39
NDV334		1.302	-0.002	-0.04	1.300	-0.003	-0.06
NHBBQ3		1.262	-0.042	-0.74	1.270	-0.033	-0.56
NHPW3Q	X	1.541	0.237	4.18	1.289	-0.014	-0.23
NM7BVQ		1.300	-0.004	-0.07	1.320	0.017	0.28
P3UTHZ	X	1.248	-0.056	-0.99	1.138	-0.165	-2.76
P9HHWH		1.360	0.056	0.99	1.375	0.071	1.19
PCKF8B	X	1.988	0.684	12.05	2.186	0.883	14.75



Plastics Interlaboratory Testing Program

Analysis 732

Percent Strain at Yield

Report #130

2nd Qtr 2024

WebCode	Data Flag	Sample C01			Sample C02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
PYTTYU		1.298	-0.006	-0.11	1.296	-0.007	-0.12
QCEJHW		1.300	-0.004	-0.07	1.300	-0.003	-0.06
QCT32U	X	0.970	-0.334	-5.89	0.980	-0.323	-5.40
RK8B3V		1.228	-0.076	-1.34	1.228	-0.075	-1.26
TQ9WKX		1.304	0.000	0.00	1.298	-0.005	-0.09
TRYVXW		1.300	-0.004	-0.07	1.300	-0.003	-0.06
U93P6V		1.260	-0.044	-0.78	1.247	-0.057	-0.95
UBA84R		1.286	-0.018	-0.32	1.282	-0.021	-0.36
UD27HP	X	0.510	-0.794	-13.99	0.522	-0.781	-13.06
UKGZGT	X	1.652	0.348	6.13	1.670	0.367	6.13
WDQBNU		1.300	-0.004	-0.07	1.300	-0.003	-0.06
WTKV83		1.217	-0.087	-1.53	1.189	-0.115	-1.92
X3PZ4Q		1.254	-0.050	-0.88	1.290	-0.013	-0.22
XANR48		1.200	-0.104	-1.83	1.180	-0.123	-2.06
XE2DBT		1.300	-0.004	-0.07	1.300	-0.003	-0.06
YD3KZR		1.282	-0.022	-0.39	1.270	-0.033	-0.56
YTDBVJ		1.300	-0.004	-0.07	1.300	-0.003	-0.06
YVJTTF	X	1.216	-0.088	-1.56	1.563	0.259	4.34

Summary Statistics

Sample C01

Sample C02

Grand Means

1.3040 Percent

1.3034 Percent

Stnd Dev Btwn Labs

0.0567 Percent

0.0598 Percent

Statistics based on 43 of 53 reporting participants

Sample C01: HIPS & Sample C02: HIPS



Plastics Interlaboratory Testing Program

Analysis 732

Percent Strain at Yield

Report #130

2nd Qtr 2024

Comments on Assigned Data Flags for Test #732

- QCT32U (X) - Data for both samples are low. Possible Systematic Error.
- CNWEFA (X) - Data for both samples are low. Possible Systematic Error.
- UKGZGT (X) - Data for both samples are high. Possible Systematic Error.
- P3UTHZ (X) - Data for sample C02 are low. Inconsistent within the determinations of both samples.
- UD27HP (X) - Data for both samples are low. Inconsistent within the determinations of both samples.
- JQGNL3 (X) - Data for both samples are high. Inconsistent within the determinations of sample C01.
- YVJTF (X) - Data for sample C02 are high. Inconsistent within the determinations of both samples.
- NHPW3Q (X) - Data for sample C01 are high. Inconsistent within the determinations of both samples.
- PCKF8B (X) - Data for both samples are high. Inconsistent within the determinations of both samples.
- 8FX9QY (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of both samples.



Plastics Interlaboratory Testing Program

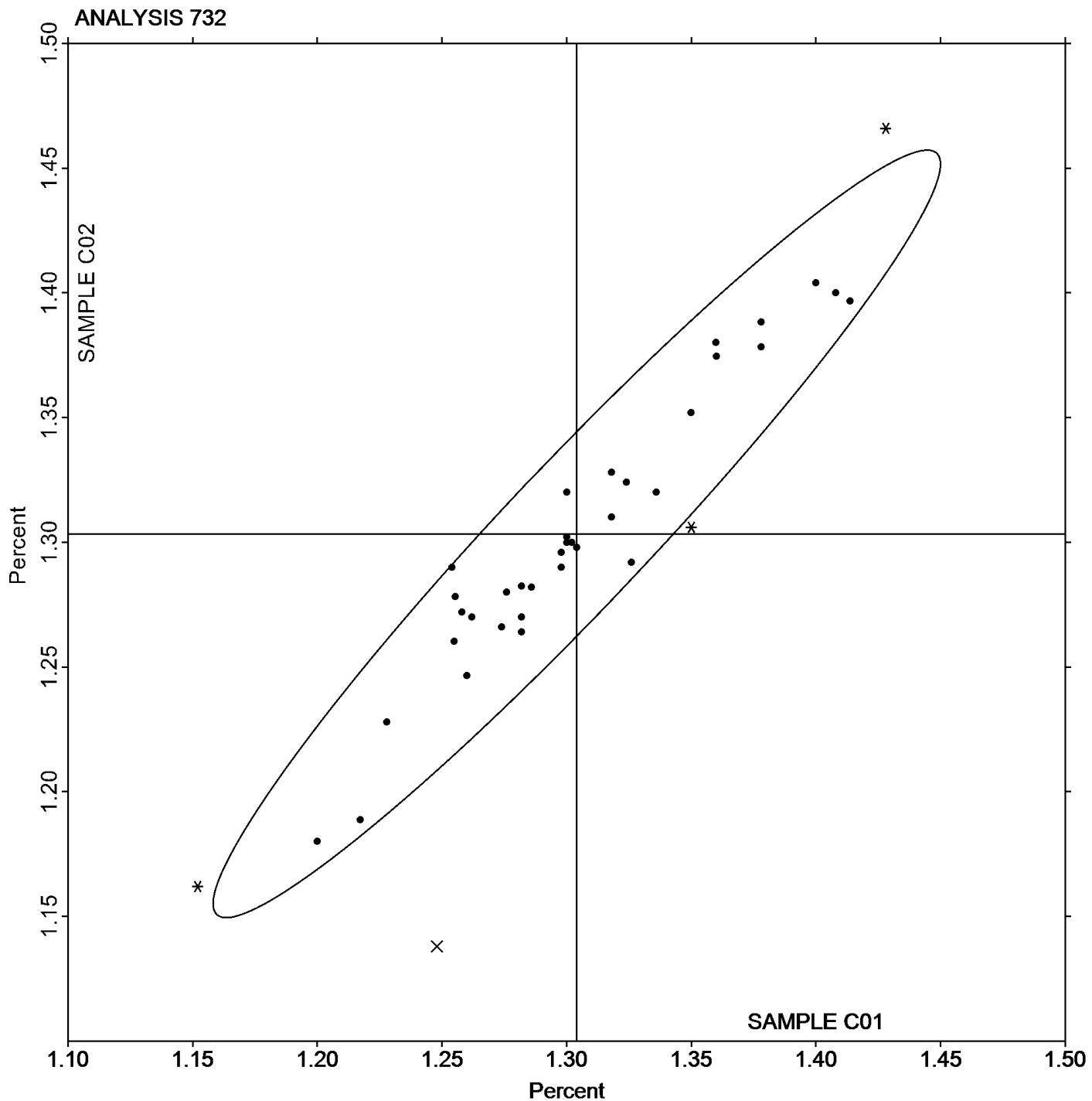
Analysis 732

Report #130

2nd Qtr 2024

Percent Strain at Yield

Grand Mean Sample C01: 1.3040 Percent Grand Mean Sample C02: 1.3034 Percent





Plastics Interlaboratory Testing Program

Analysis 734

Report #130

2nd Qtr 2024

Modulus of Elasticity - MPa

WebCode	Data Flag	Sample C01			Sample C02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2Q2AN4		2,320	38	0.41	2,315	31	0.32
384ACW		2,278	-5	-0.05	2,276	-8	-0.09
8FX9QY	X	1,860	-423	-4.58	1,640	-644	-6.63
9ND2NG		2,254	-29	-0.31	2,280	-4	-0.04
A8U6CC		2,289	7	0.07	2,287	3	0.03
BEA4KW		2,369	87	0.94	2,370	86	0.88
BMRC9T	*	2,277	-5	-0.06	2,392	108	1.11
CGUHLC		2,223	-60	-0.65	2,238	-47	-0.48
CNWEFA	X	2,922	639	6.92	2,911	627	6.46
CPE7RE		2,276	-6	-0.07	2,258	-26	-0.27
CWAFTX		2,260	-23	-0.24	2,265	-19	-0.20
DJJ4UT		2,301	18	0.20	2,278	-6	-0.06
DVUFA9		2,311	28	0.30	2,343	59	0.61
EVQ829	*	2,050	-233	-2.52	2,085	-199	-2.05
EYPHW9		2,219	-64	-0.69	2,225	-59	-0.61
H3HPMM		2,351	68	0.74	2,361	76	0.79
J4K8W3	X	2,485	202	2.19	2,158	-126	-1.30
JLNKUJ		2,440	157	1.70	2,438	153	1.58
JQGNL3	X	1,567	-715	-7.75	2,008	-276	-2.84
KLMX4X		2,259	-23	-0.25	2,321	37	0.38
KQGWB2		2,203	-80	-0.87	2,182	-102	-1.05
L2CPWX		2,201	-81	-0.88	2,204	-80	-0.83
L323FF	*	2,410	127	1.38	2,308	24	0.24
L8ENL2		2,362	79	0.86	2,378	93	0.96
M2A7QL		2,414	131	1.42	2,378	94	0.97
M8AQKV		2,269	-14	-0.15	2,248	-36	-0.37
N6PXET		2,315	32	0.35	2,320	36	0.37
NAVR84		2,279	-3	-0.04	2,283	-2	-0.02
NDV334		2,274	-9	-0.10	2,279	-6	-0.06
NHBBQ3	X	2,344	61	0.66	2,513	228	2.35
NHPW3Q		2,087	-196	-2.12	2,099	-185	-1.91
NJM6BA	X	2,176	-107	-1.16	2,786	502	5.17
NM7BVQ		2,258	-25	-0.27	2,170	-114	-1.18
P3UTHZ	X	2,216	-67	-0.72	2,474	189	1.95
P9HHWH		2,259	-23	-0.25	2,269	-16	-0.16



Plastics Interlaboratory Testing Program

Analysis 734

Report #130

2nd Qtr 2024

Modulus of Elasticity - MPa

WebCode	Data Flag	Sample C01			Sample C02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
PCKF8B	X	1,735	-547	-5.93	1,748	-537	-5.53
PYTTYU		2,247	-36	-0.39	2,242	-42	-0.43
QCEJHW		2,268	-15	-0.16	2,266	-18	-0.19
QCT32U		2,338	55	0.60	2,294	10	0.10
RK8B3V		2,472	189	2.05	2,490	206	2.12
TQ9WKX		2,499	216	2.34	2,484	199	2.05
TRYVXW		2,266	-16	-0.18	2,283	-1	-0.02
U93P6V		2,224	-59	-0.64	2,252	-32	-0.33
UBA84R		2,328	46	0.49	2,301	17	0.17
UD27HP		2,240	-43	-0.46	2,327	43	0.44
UKGZGT		2,219	-63	-0.68	2,183	-102	-1.05
WDQBNU		2,260	-23	-0.25	2,265	-20	-0.20
WTKV83	X	2,594	312	3.37	2,503	218	2.25
X3PZ4Q	X	2,328	46	0.49	2,512	227	2.34
XANR48	*	2,460	177	1.92	2,543	259	2.67
XE2DBT		2,292	9	0.10	2,270	-14	-0.15
YD3KZR		2,202	-80	-0.87	2,138	-146	-1.50
YTDBVJ		2,130	-153	-1.65	2,136	-148	-1.53
YVJTTF		2,185	-98	-1.06	2,184	-100	-1.03

Summary Statistics	Sample C01	Sample C02
Grand Means	2,282.7 MPa	2,284.3 MPa
Stnd Dev Btwn Labs	92.3 MPa	97.1 MPa
Statistics based on 44 of 54 reporting participants		

Sample C01: HIPS & Sample C02: HIPS



Plastics Interlaboratory Testing Program

Analysis 734

Modulus of Elasticity - MPa

Report #130

2nd Qtr 2024

Comments on Assigned Data Flags for Test #734

- X3PZ4Q (X) - Inconsistent in testing between samples.
- CNWEFA (X) - Data for both samples are high. Possible Systematic Error.
- P3UTHZ (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample C01.
- J4K8W3 (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.
- JQGNL3 (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample C01.
- NHBBQ3 (X) - Inconsistent in testing between samples.
- NJM6BA (X) - Data for sample C02 are high. Inconsistent within the determinations of sample C02.
- PCKF8B (X) - Data for both samples are low. Possible Systematic Error.
- WTKV83 (X) - Data for sample C01 are high.
- 8FX9QY (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of both samples.



Plastics Interlaboratory Testing Program

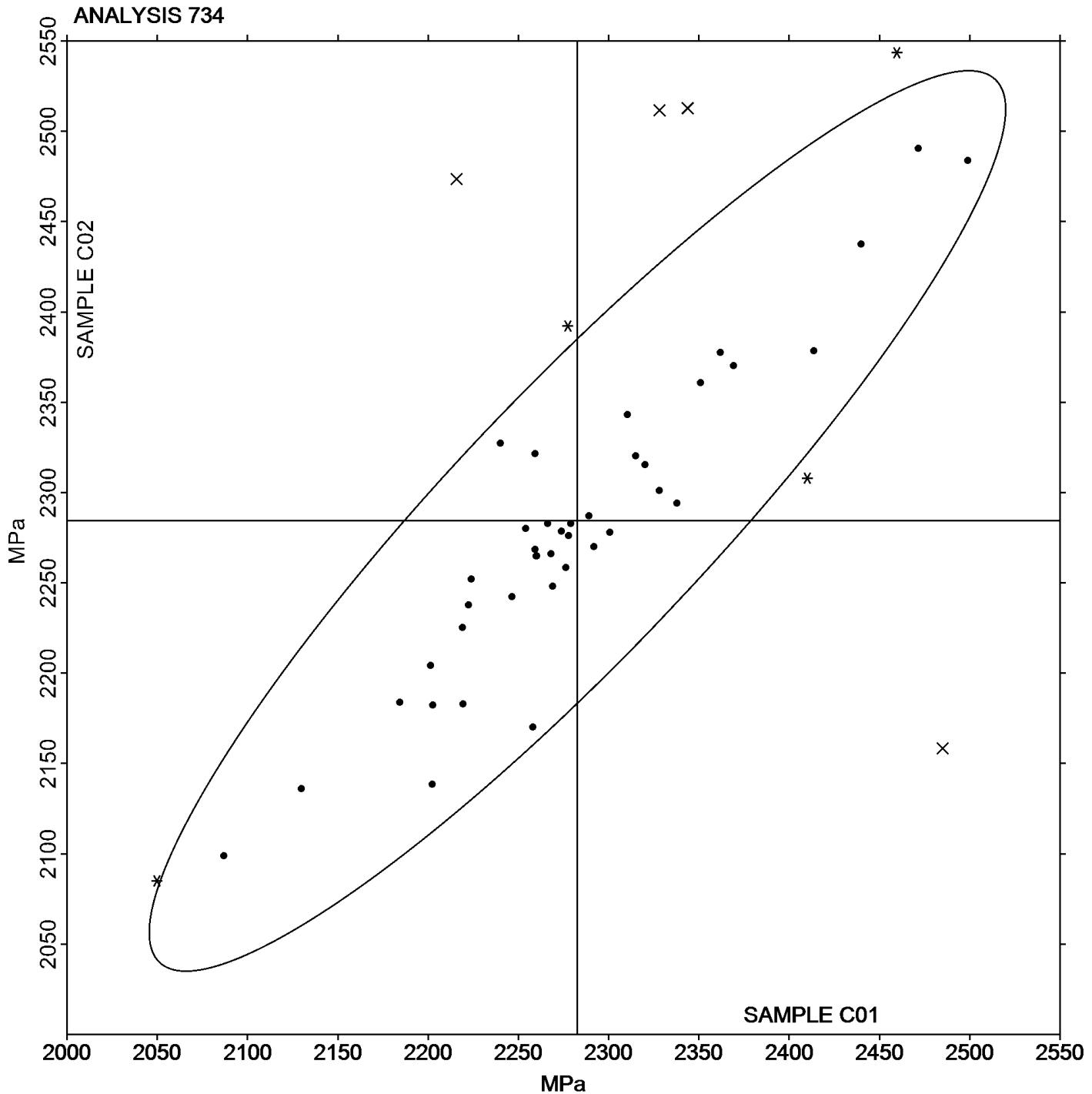
Analysis 734

Report #130

2nd Qtr 2024

Modulus of Elasticity - MPa

Grand Mean Sample C01: 2,282.69 MPa Grand Mean Sample C02: 2,284.29 MPa





Plastics Interlaboratory Testing Program

Analysis 736

Report #130

2nd Qtr 2024

Flexural Modulus - MPa

WebCode	Data Flag	Sample K01			Sample K02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2Q2AN4		2,312	3	0.02	2,291	-29	-0.25
384ACW		2,236	-73	-0.61	2,258	-62	-0.54
3MCM8Z	X	2,832	523	4.40	2,877	557	4.84
3RP9DL	X	1,977	-332	-2.79	1,863	-457	-3.97
823Q22		2,428	119	1.00	2,432	112	0.97
8FX9QY		2,391	82	0.69	2,398	78	0.68
9CZXJ7	X	1,917	-392	-3.30	1,895	-425	-3.70
9ND2NG		2,272	-37	-0.31	2,244	-77	-0.67
9P3F7Y		2,424	115	0.97	2,405	85	0.74
A8U6CC		2,288	-21	-0.17	2,297	-23	-0.20
CGUHLC		2,297	-12	-0.10	2,325	5	0.04
CNWEFA	*	1,959	-349	-2.94	1,994	-327	-2.84
CPE7RE		2,149	-159	-1.34	2,184	-137	-1.19
CWAFTX		2,315	6	0.05	2,356	35	0.31
DJJ4UT		2,319	10	0.08	2,339	19	0.16
EVA99		2,241	-68	-0.57	2,228	-92	-0.80
EVQ829		2,280	-29	-0.25	2,287	-34	-0.29
EYPHW9	*	2,236	-72	-0.61	2,311	-10	-0.09
H3HPMM	*	2,526	218	1.83	2,569	248	2.16
J4K8W3		2,192	-117	-0.98	2,210	-111	-0.96
JLNKUJ		2,551	242	2.04	2,557	236	2.05
JQGNL3	X	2,116	-192	-1.62	1,937	-384	-3.34
KLMX4X		2,258	-51	-0.43	2,282	-38	-0.33
L2CPWX		2,309	0	0.00	2,323	3	0.02
L323FF		2,269	-40	-0.33	2,275	-45	-0.39
L8ENL2	*	2,297	-12	-0.10	2,253	-67	-0.59
M2A7QL		2,237	-72	-0.61	2,268	-52	-0.45
N6PXET		2,301	-8	-0.06	2,289	-32	-0.28
NDV334		2,331	22	0.18	2,307	-14	-0.12
NHBBQ3		2,325	17	0.14	2,344	23	0.20
NHPW3Q		2,358	50	0.42	2,371	50	0.44
NJM6BA		2,566	257	2.17	2,568	248	2.15
P3UTHZ		2,491	182	1.53	2,506	185	1.61
P6H7ZH		2,192	-117	-0.98	2,246	-74	-0.65
P9HHWH		2,291	-18	-0.15	2,284	-37	-0.32



Plastics Interlaboratory Testing Program

Analysis 736

Report #130

2nd Qtr 2024

Flexural Modulus - MPa

WebCode	Data Flag	Sample K01			Sample K02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
PYTTYU		2,121	-188	-1.59	2,145	-176	-1.53
QCT32U		2,457	148	1.24	2,456	136	1.18
RK8B3V		2,419	110	0.93	2,423	103	0.89
TQ9WKX		2,506	197	1.66	2,522	202	1.76
TRYVXW		2,332	23	0.19	2,328	8	0.07
U93P6V		2,158	-151	-1.27	2,194	-126	-1.10
UBA84R		2,255	-54	-0.46	2,294	-27	-0.23
UD27HP		2,284	-25	-0.21	2,304	-16	-0.14
WDQBNU		2,380	72	0.60	2,404	84	0.73
WTKV83		2,130	-179	-1.50	2,131	-190	-1.65
X3PZ4Q	X	2,601	292	2.46	2,673	353	3.07
XANR48		2,414	105	0.89	2,403	83	0.72
XE2DBT		2,278	-31	-0.26	2,270	-50	-0.44
XMB2NR		2,303	-6	-0.05	2,300	-21	-0.18
YTDBVJ		2,290	-19	-0.16	2,304	-16	-0.14
YVJTTF	X	2,366	57	0.48	2,273	-47	-0.41
ZPQBR9		2,242	-66	-0.56	2,264	-56	-0.49

Summary Statistics

Sample K01

Sample K02

Grand Means

2,308.9 MPa

2,320.4 MPa

Stnd Dev Btwn Labs

118.7 MPa

115.0 MPa

Statistics based on 46 of 52 reporting participants

Sample K01: HIPS & Sample K02: HIPS

Comments on Assigned Data Flags for Test #736

9CZXJ7 (X) - Data for both samples are low. Possible Systematic Error.

X3PZ4Q (X) - Data for sample K02 are high.

JQGNL3 (X) - Data for sample K02 are low. Inconsistent within the determinations of both samples.

3RP9DL (X) - Data for both samples are low. Possible Systematic Error. Inconsistent within the determinations of sample K01.

YVJTTF (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample K02.

3MCM8Z (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of sample K02.



Plastics Interlaboratory Testing Program

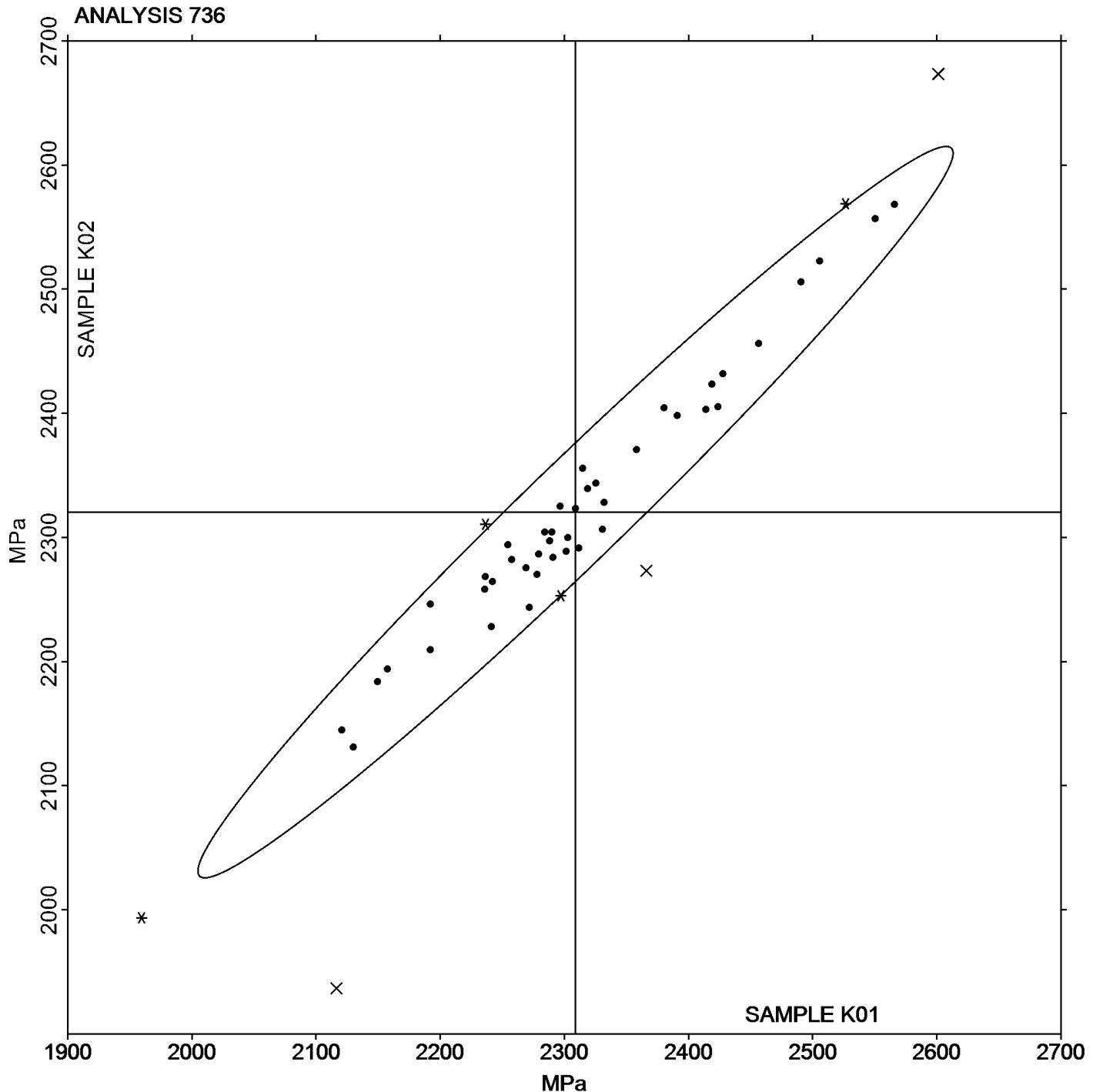
Analysis 736

Report #130

2nd Qtr 2024

Flexural Modulus - MPa

Grand Mean Sample K01: 2,308.90 MPa Grand Mean Sample K02: 2,320.43 MPa





Plastics Interlaboratory Testing Program

Analysis 737

Report #130

2nd Qtr 2024

Flexural Stress at 3.5% Strain - MPa

WebCode	Data Flag	Sample K01			Sample K02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2Q2AN4		41.16	-0.40	-0.26	41.18	-0.61	-0.43
384ACW		41.90	0.34	0.23	41.90	0.11	0.08
823Q22		42.96	1.40	0.93	43.16	1.38	0.97
8FX9QY		42.10	0.54	0.36	42.21	0.43	0.30
9ND2NG		40.72	-0.84	-0.56	40.71	-1.07	-0.75
CGUHLC	*	39.88	-1.68	-1.12	41.22	-0.56	-0.40
CNWEFA		39.80	-1.76	-1.17	40.26	-1.52	-1.07
CPE7RE		41.89	0.33	0.22	42.24	0.45	0.32
CWAFTX		40.51	-1.04	-0.70	41.15	-0.63	-0.45
DJJ4UT		39.32	-2.24	-1.49	39.74	-2.04	-1.44
EVA99		41.03	-0.52	-0.35	41.19	-0.59	-0.42
EVQ829		41.25	-0.30	-0.20	41.40	-0.38	-0.27
EYPHW9		39.01	-2.55	-1.70	39.51	-2.28	-1.61
H3HPMM	*	44.59	3.03	2.02	45.12	3.34	2.35
J4K8W3	X	32.45	-9.11	-6.07	32.46	-9.33	-6.57
JLNKUJ		44.60	3.04	2.02	44.47	2.68	1.89
KLMX4X		41.33	-0.23	-0.15	41.84	0.06	0.04
L2CPWX		40.80	-0.75	-0.50	41.30	-0.48	-0.34
L323FF		39.76	-1.80	-1.20	40.22	-1.57	-1.11
L8ENL2		41.76	0.20	0.13	42.16	0.37	0.26
M2A7QL		39.76	-1.80	-1.20	40.52	-1.26	-0.89
N6PXET		42.63	1.07	0.71	42.49	0.71	0.50
NDV334		42.25	0.69	0.46	41.69	-0.10	-0.07
NHBBQ3		41.15	-0.41	-0.27	41.67	-0.11	-0.08
NHPW3Q		42.38	0.82	0.55	42.67	0.88	0.62
NJM6BA		42.64	1.08	0.72	42.06	0.28	0.19
P3UTHZ		43.08	1.52	1.01	43.23	1.44	1.02
P9HHWH		39.13	-2.43	-1.62	39.02	-2.76	-1.95
PYTTYU		41.41	-0.14	-0.10	41.34	-0.44	-0.31
QCT32U		43.57	2.01	1.34	43.52	1.74	1.23
TQ9WKX	X	45.05	3.49	2.32	46.06	4.27	3.01
TRYVXW		41.36	-0.20	-0.13	40.98	-0.80	-0.57
U93P6V		41.14	-0.42	-0.28	41.64	-0.14	-0.10
UBA84R		41.51	-0.04	-0.03	41.94	0.15	0.11
UD27HP		41.54	-0.02	-0.01	42.05	0.27	0.19



Plastics Interlaboratory Testing Program

Analysis 737

Report #130

2nd Qtr 2024

Flexural Stress at 3.5% Strain - MPa

WebCode	Data Flag	Sample K01			Sample K02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
WDQBNU		41.00	-0.56	-0.37	41.33	-0.46	-0.32
WTKV83		41.38	-0.17	-0.12	41.23	-0.56	-0.39
X3PZ4Q		43.18	1.62	1.08	43.75	1.96	1.38
XANR48	*	45.53	3.98	2.65	45.65	3.86	2.72
XE2DBT		41.24	-0.32	-0.21	41.21	-0.57	-0.40
XMB2NR		41.34	-0.22	-0.15	41.40	-0.38	-0.27
YTDBVJ		42.32	0.77	0.51	42.64	0.86	0.61
YVJTTF		42.72	1.16	0.77	42.71	0.92	0.65
ZPQBR9		38.80	-2.76	-1.84	39.22	-2.56	-1.81

Summary Statistics	Sample K01	Sample K02
Grand Means	41.558 MPa	41.784 MPa
Stnd Dev Btwn Labs	1.501 MPa	1.419 MPa

Statistics based on 42 of 44 reporting participants

Sample K01: HIPS & Sample K02: HIPS

Comments on Assigned Data Flags for Test #737

J4K8W3 (X) - Data for both samples are low. Possible Systematic Error.

TQ9WKX (X) - Data for sample K02 are high.



Plastics Interlaboratory Testing Program

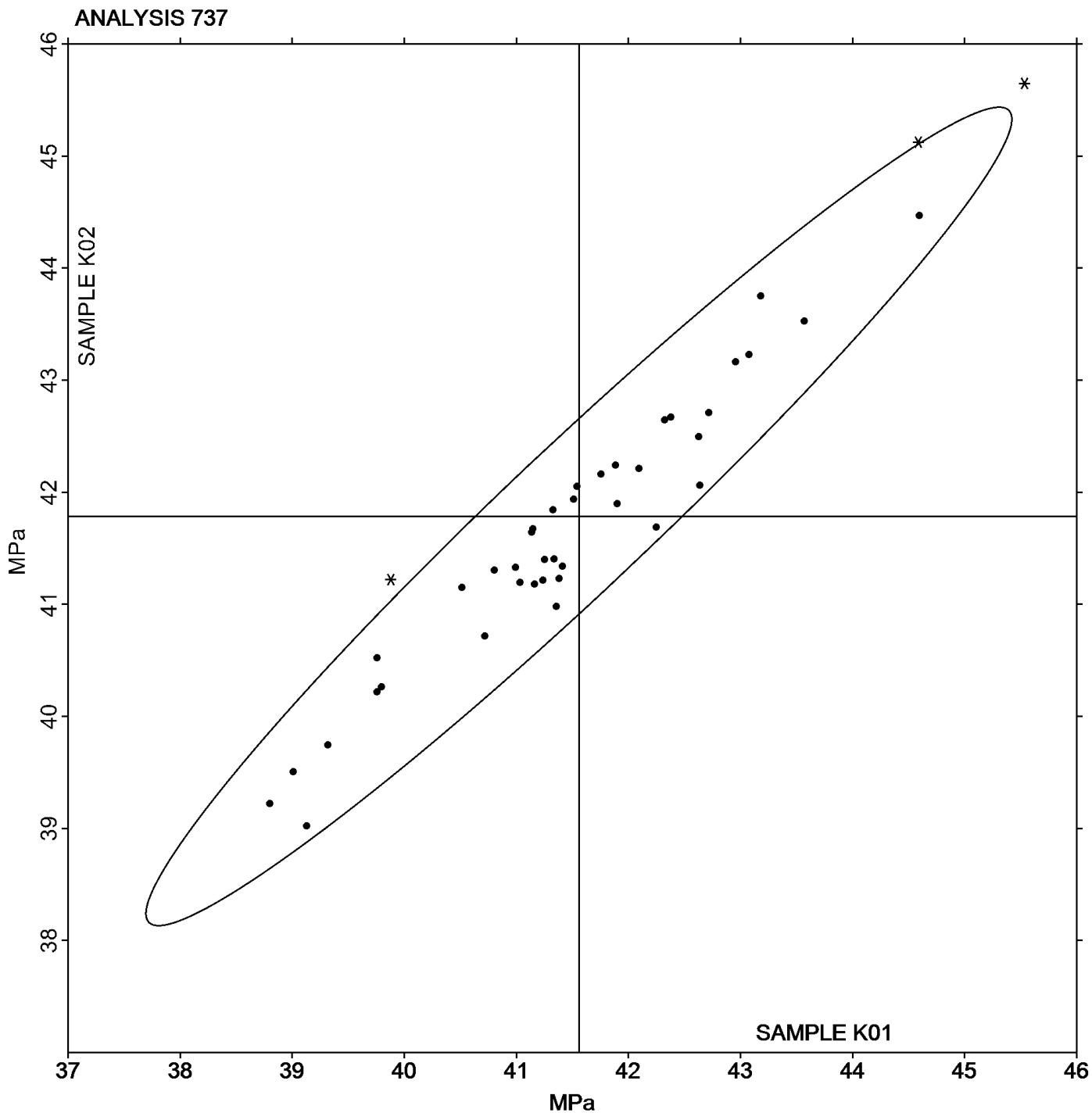
Analysis 737

Report #130

2nd Qtr 2024

Flexural Stress at 3.5% Strain - MPa

Grand Mean Sample K01: 41.558 MPa Grand Mean Sample K02: 41.784 MPa





Plastics Interlaboratory Testing Program

Analysis 738

Report #130

2nd Qtr 2024

Flexural Stress at Yield - MPa

WebCode	Data Flag	Sample K01			Sample K02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2Q2AN4		41.51	-0.81	-0.54	41.40	-1.17	-0.79
384ACW		43.12	0.80	0.54	43.86	1.29	0.86
823Q22		43.42	1.10	0.74	43.72	1.15	0.77
8FX9QY		42.96	0.65	0.43	43.28	0.70	0.47
9ND2NG		41.69	-0.63	-0.42	41.81	-0.77	-0.51
A8U6CC		42.26	-0.05	-0.04	42.67	0.09	0.06
CGUHLC	*	40.38	-1.94	-1.30	42.00	-0.57	-0.39
CNWEFA		40.26	-2.06	-1.38	40.68	-1.89	-1.27
CPE7RE		42.35	0.03	0.02	42.91	0.33	0.22
CWAFTX		41.84	-0.48	-0.32	42.66	0.08	0.06
DJJ4UT		39.97	-2.35	-1.57	40.41	-2.16	-1.45
EVA99		41.23	-1.09	-0.73	41.35	-1.22	-0.82
EVQ829		42.53	0.21	0.14	42.77	0.19	0.13
JLNKUJ	*	46.23	3.91	2.62	45.84	3.27	2.19
JQGNL3	*	40.97	-1.35	-0.90	39.97	-2.60	-1.74
KLMX4X		41.63	-0.69	-0.46	42.29	-0.29	-0.19
L2CPWX		42.25	-0.06	-0.04	42.86	0.29	0.19
L8ENL2		42.20	-0.12	-0.08	42.61	0.03	0.02
N6PXET		42.63	0.31	0.21	42.49	-0.08	-0.05
NDV334		42.56	0.24	0.16	42.06	-0.51	-0.34
NHBBQ3		41.53	-0.79	-0.53	42.12	-0.46	-0.31
NHPW3Q		42.79	0.47	0.32	43.15	0.57	0.38
NJM6BA		42.72	0.40	0.27	42.74	0.17	0.11
P3UTHZ		43.59	1.27	0.85	44.06	1.49	1.00
P9HHWH		39.25	-3.06	-2.05	39.12	-3.45	-2.32
PYTTYU		42.83	0.51	0.34	42.89	0.31	0.21
QCT32U		43.57	1.25	0.84	43.52	0.95	0.64
RK8B3V		45.20	2.88	1.93	45.68	3.11	2.08
TRYVXW		42.32	0.00	0.00	41.74	-0.83	-0.56
U93P6V		42.08	-0.24	-0.16	42.56	-0.01	-0.01
UD27HP		42.00	-0.31	-0.21	42.59	0.02	0.01
WDQBNU		41.10	-1.21	-0.81	41.52	-1.06	-0.71
WTKV83		42.43	0.11	0.07	42.37	-0.20	-0.14
X3PZ4Q		43.40	1.08	0.72	43.93	1.35	0.91
XANR48		45.53	3.22	2.16	45.66	3.08	2.07



Plastics Interlaboratory Testing Program

Analysis 738

Report #130

2nd Qtr 2024

Flexural Stress at Yield - MPa

WebCode	Data Flag	Sample K01			Sample K02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
XE2DBT		42.45	0.13	0.09	42.45	-0.12	-0.08
YTDBVJ		43.44	1.12	0.75	43.97	1.40	0.94
YVJTTF		43.18	0.86	0.58	43.28	0.70	0.47
ZPQBR9		38.98	-3.34	-2.24	39.42	-3.16	-2.12

Summary Statistics

Sample K01

Sample K02

Grand Means

42.318 MPa

42.574 MPa

Stnd Dev Btwn Labs

1.491 MPa

1.491 MPa

Statistics based on 39 of 39 reporting participants

Sample K01: HIPS & Sample K02: HIPS



Plastics Interlaboratory Testing Program

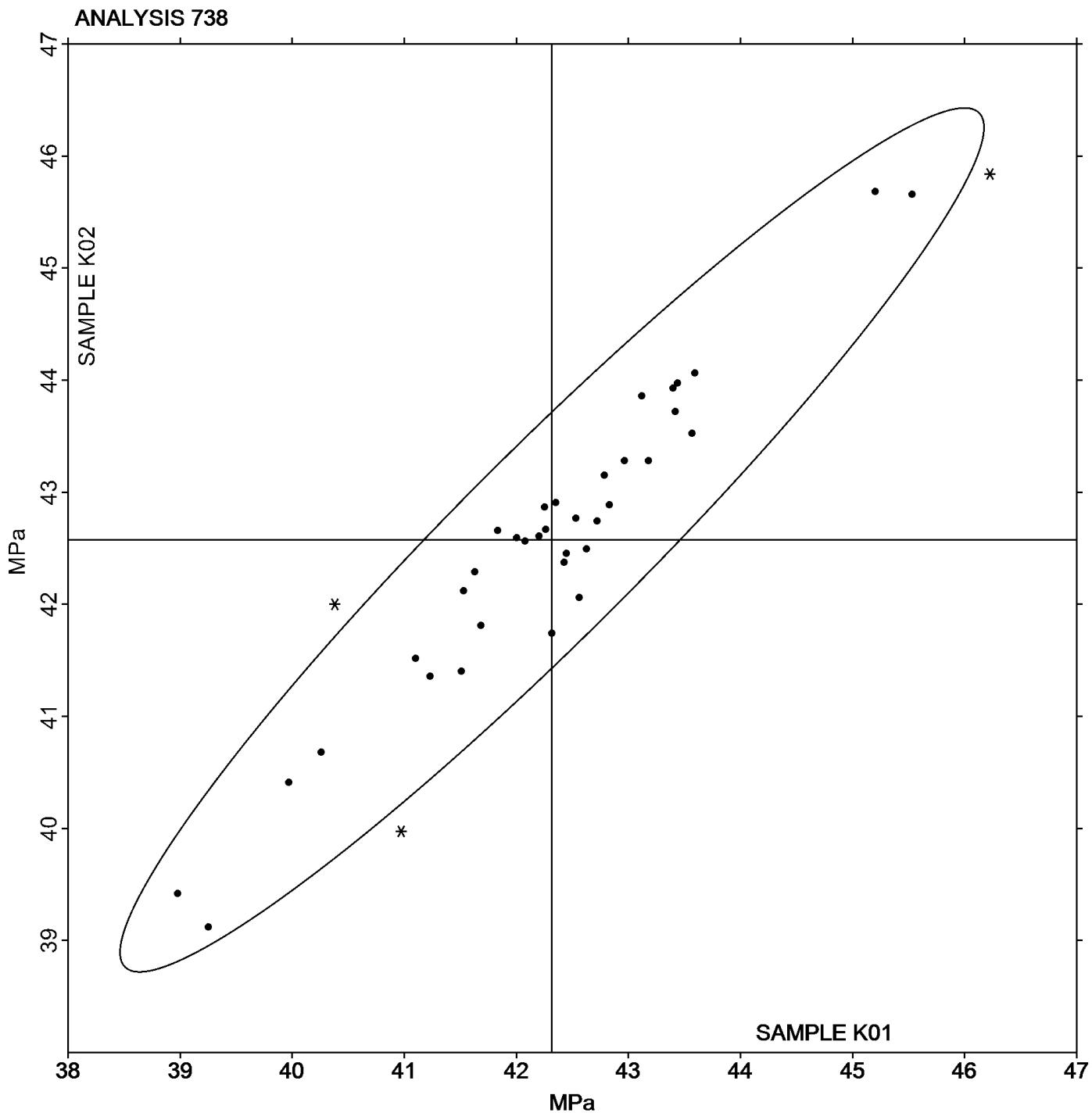
Analysis 738

Report #130

2nd Qtr 2024

Flexural Stress at Yield - MPa

Grand Mean Sample K01: 42.318 MPa Grand Mean Sample K02: 42.574 MPa





Plastics Interlaboratory Testing Program

Report #130

Analysis 750

2nd Qtr 2024

Flow Rates of Thermoplastics (190 or 230C/2.16 kg) - g/10 mins

WebCode	Data Flag	Sample X01			Sample X02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
24MPR3		12.37	-0.09	-0.14	12.89	0.26	0.35	CS
2AE3FC		12.90	0.44	0.68	13.17	0.55	0.73	TO
2ELMDG		13.20	0.74	1.14	13.24	0.62	0.83	GO
2Q2AN4	*	14.10	1.64	2.53	14.80	2.18	2.93	CE
36E6FJ		12.45	-0.01	-0.02	12.50	-0.12	-0.17	TO
36RUHW		12.95	0.49	0.76	13.05	0.43	0.57	TO
384ACW	X	4.25	-8.21	-12.70	4.21	-8.42	-11.33	WZ
3MCM8Z		13.68	1.22	1.89	14.04	1.42	1.91	DY
3RP9DL		12.92	0.45	0.70	13.70	1.08	1.45	XX
44CWNB	X	14.76	2.30	3.56	14.12	1.50	2.02	WZ
4D2LLY		12.95	0.49	0.76	13.25	0.63	0.84	WZ
4HE43G	X	13.03	0.57	0.88	15.53	2.90	3.90	TO
4R8EDC		12.17	-0.30	-0.46	12.11	-0.52	-0.70	TO
6Huzrl		12.05	-0.41	-0.64	12.75	0.13	0.17	TO
823Q22	X	14.80	2.34	3.62	12.30	-0.32	-0.44	TO
8FX9QY		11.00	-1.46	-2.26	11.43	-1.20	-1.61	CE
8WN4AG		11.50	-0.96	-1.49	12.00	-0.62	-0.84	WZ
9CZXJ7		12.22	-0.24	-0.37	12.37	-0.25	-0.34	XX
9ND2NG		13.10	0.64	0.99	13.55	0.93	1.25	TO
9PJWY7		13.07	0.61	0.94	12.87	0.24	0.33	TO
A8U6CC		12.68	0.21	0.33	12.60	-0.03	-0.04	TO
AQ9KWT		12.49	0.03	0.04	12.58	-0.04	-0.06	TO
B2PNGW	X	0.57	-11.89	-18.39	0.61	-12.02	-16.17	TM
BD3LUD		11.42	-1.04	-1.62	11.12	-1.50	-2.02	TO
BEA4KW		13.08	0.62	0.96	13.81	1.18	1.59	TO
C7WEJ3		11.82	-0.64	-0.99	12.53	-0.09	-0.13	TO
CGUHLC		12.89	0.43	0.66	13.63	1.00	1.35	TO
CPE7RE	X	14.20	1.74	2.69	13.25	0.63	0.84	WZ
CWAFTX		11.50	-0.96	-1.49	11.70	-0.92	-1.24	KA
DJJ4UT		11.65	-0.81	-1.25	11.85	-0.77	-1.04	CE
DNWN2E		12.35	-0.11	-0.17	12.90	0.28	0.37	TO
EYPHW9	X	14.49	2.02	3.13	12.89	0.26	0.35	DY
FLF7YK		11.68	-0.79	-1.22	12.18	-0.45	-0.60	XX
FQCX6W		12.58	0.12	0.18	12.47	-0.16	-0.21	TO
FXQUT4		12.93	0.46	0.72	12.88	0.25	0.34	TO



Plastics Interlaboratory Testing Program

Analysis 750

Report #130

2nd Qtr 2024

Flow Rates of Thermoplastics (190 or 230C/2.16 kg) - g/10 mins

WebCode	Data Flag	Sample X01			Sample X02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
GWDT22		11.55	-0.91	-1.41	11.65	-0.97	-1.31	KA
GXQ4E9		12.66	0.19	0.30	13.39	0.76	1.02	TO
H3HPMM		11.65	-0.81	-1.25	11.56	-1.07	-1.44	WZ
HZQTXT		13.35	0.89	1.37	13.21	0.59	0.79	TO
JATBAV		12.29	-0.17	-0.26	12.32	-0.31	-0.42	TO
JB7ZAM	X	14.00	1.54	2.38	13.21	0.59	0.79	TO
JLNKUJ		12.12	-0.35	-0.54	12.40	-0.22	-0.30	DY
K82PZ6		13.34	0.87	1.35	12.93	0.30	0.40	DY
KLMX4X		13.15	0.69	1.07	13.15	0.53	0.71	TO
KPHXTT		13.20	0.74	1.15	13.11	0.49	0.65	TO
MZCXH3		13.00	0.54	0.83	13.40	0.78	1.04	TO
NDV334		12.18	-0.28	-0.43	12.56	-0.07	-0.09	TY
NGX2DW	X	5.50	-6.96	-10.77	5.40	-7.22	-9.72	TO
NHBBQ3		11.85	-0.61	-0.95	11.80	-0.82	-1.11	TO
NHPW3Q		12.47	0.00	0.01	12.62	-0.01	-0.01	TO
NJM6BA		11.48	-0.98	-1.52	11.26	-1.36	-1.84	TO
P3UTHZ		13.05	0.59	0.91	12.95	0.33	0.44	TO
P7QL8N		12.60	0.14	0.21	12.30	-0.32	-0.44	TO
P9HHWH		11.84	-0.63	-0.97	11.83	-0.80	-1.08	XX
PX3GPN		11.80	-0.66	-1.02	11.95	-0.67	-0.91	TO
PYTTYU		12.45	-0.01	-0.02	12.15	-0.47	-0.64	WZ
QCT32U		12.50	0.04	0.06	12.45	-0.17	-0.23	WZ
RK8B3V		12.56	0.10	0.15	12.28	-0.34	-0.46	WZ
T6NURJ		12.24	-0.22	-0.34	12.12	-0.51	-0.69	WZ
TQ9WKX		12.31	-0.16	-0.24	12.30	-0.33	-0.44	DY
TQKNCE	X	12.50	0.04	0.06	14.00	1.38	1.85	TO
TRYVXW		12.56	0.10	0.15	12.78	0.16	0.21	GO
U3X8AF	X	10.35	-2.11	-3.27	12.65	0.03	0.03	XX
U93P6V		12.50	0.04	0.06	12.49	-0.14	-0.19	DY
UGZGDP		12.55	0.09	0.14	12.65	0.03	0.03	CE
VXHZLG	*	10.73	-1.73	-2.68	11.02	-1.60	-2.16	TO
WDQBNU		13.00	0.54	0.84	13.50	0.87	1.17	CE
WFGCW3		13.50	1.04	1.61	13.45	0.83	1.11	RR
X3PZ4Q		12.60	0.14	0.21	12.85	0.23	0.30	TO
XANR48	X	4.60	-7.86	-12.16	4.79	-7.83	-10.54	TO



Plastics Interlaboratory Testing Program

Analysis 750

Report #130

2nd Qtr 2024

Flow Rates of Thermoplastics (190 or 230C/2.16 kg) - g/10 mins

WebCode	Data Flag	Sample X01			Sample X02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
XE2DBT		12.57	0.11	0.17	12.51	-0.11	-0.15	GO
XV6A9H	*	13.40	0.94	1.45	14.30	1.68	2.25	TO
YD3KZR		12.10	-0.36	-0.56	11.85	-0.77	-1.04	TO
YTDBVJ		12.55	0.08	0.13	12.83	0.21	0.28	TO
YTRW6L	X	8.96	-3.51	-5.42	9.31	-3.32	-4.47	DY
YVJTTF		12.35	-0.12	-0.18	12.24	-0.39	-0.52	TO
Z96D2F		12.10	-0.36	-0.56	12.09	-0.54	-0.73	WZ
ZCYLUN		12.31	-0.15	-0.23	12.76	0.13	0.18	WZ
ZPQBR9		12.34	-0.12	-0.19	12.34	-0.29	-0.39	DY

Summary Statistics	Sample X01	Sample X02
Grand Means	12.461 grams/10 mins	12.624 grams/10 mins
Stnd Dev Btwn Labs	0.647 grams/10 mins	0.743 grams/10 mins

Statistics based on 66 of 79 reporting participants

Sample X01: PP & Sample X02: PP

Comments on Assigned Data Flags for Test #750

- EYPHW9 (X) - Data for sample X01 are high.
- CPE7RE (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample X01.
- 4HE43G (X) - Data for sample X02 are high.
- YTRW6L (X) - Data for both samples are low. Possible Systematic Error.
- NGX2DW (X) - Data for both samples are low.
- 823Q22 (X) - Data for sample X01 are high. Inconsistent within the determinations of sample X01.
- B2PNGW (X) - Extreme data.
- TQKNCE (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample X01.
- U3X8AF (X) - Data for sample X01 are low. Inconsistent within the determinations of sample X01.
- 44CWNB (X) - Data for sample X01 are high.
- 384ACW (X) - Data for both samples are low.
- JB7ZAM (X) - Inconsistent in testing between samples.
- XANR48 (X) - Data for both samples are low.



Plastics Interlaboratory Testing Program

Analysis 750

Report #130

2nd Qtr 2024

Flow Rates of Thermoplastics (190 or 230C/2.16 kg) - g/10 mins

Results by Methodology (as reported by laboratory)

Test Methodology	Sample X01 PP			Sample X02 PP			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
Procedure A of ASTM D1238	12.425	0.657	-0.04	12.603	0.760	-0.02	32/40
Procedure B of ASTM D1238	12.536	0.553	0.07	12.598	0.569	-0.03	21/22
Procedure A of ISO 1133	12.423	0.963	-0.04	12.747	1.185	0.12	9/13
Procedure B of ISO 1133	12.447	0.179	-0.01	12.654	0.181	0.03	4/4

Key to Instrument Codes Reported by Participants

CE	Ceast	CS	CSI
DY	Dynisco	GO	Gottfert
KA	Kayeness	RR	Ray Ran
TM	TMI	TO	Tinius Olsen
TY	Toyoseiki Seisakusho	WZ	Zwick
XX	Instrument manufacturer not specified by lab		



Plastics Interlaboratory Testing Program

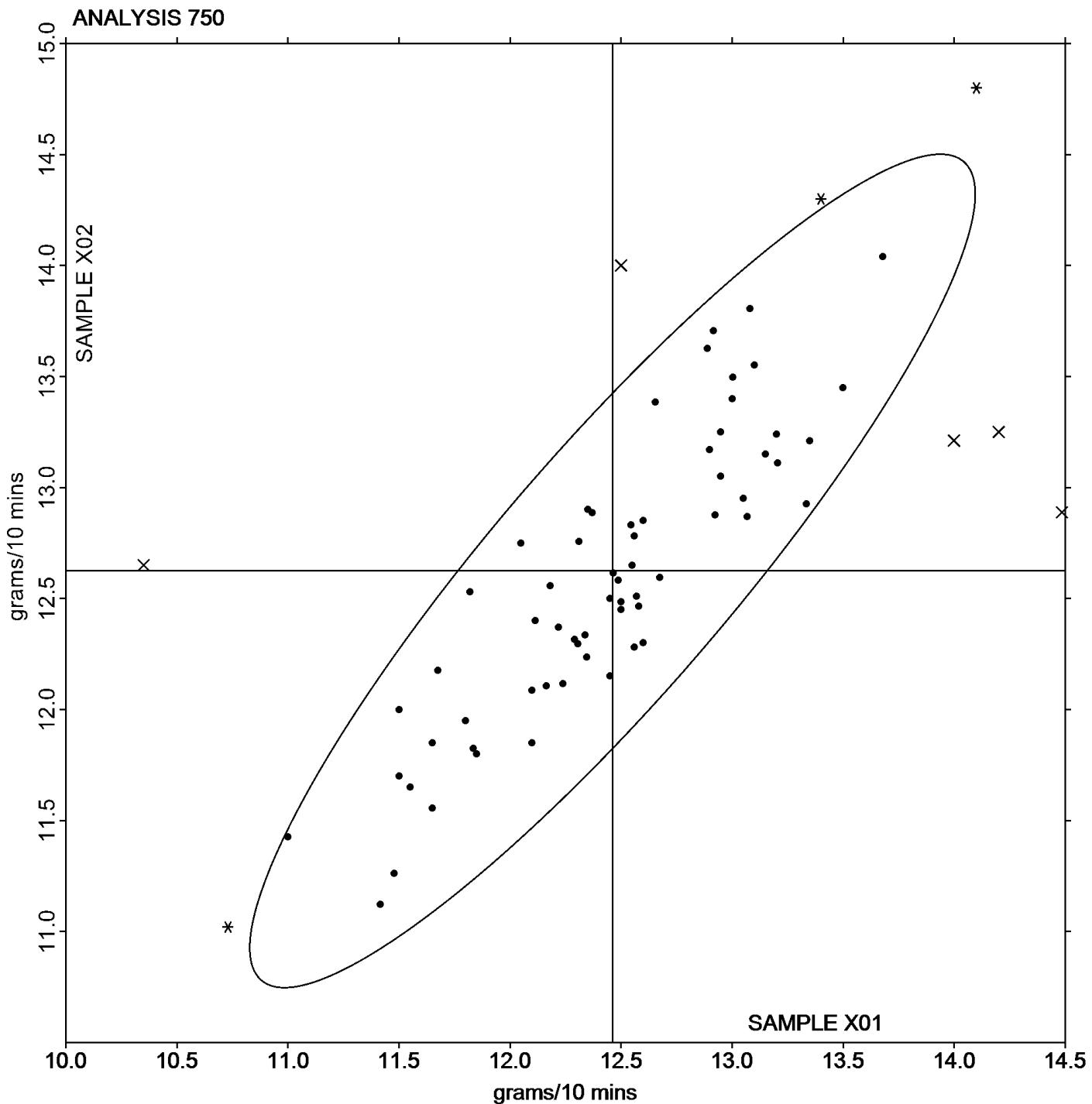
Analysis 750

Report #130

2nd Qtr 2024

Flow Rates of Thermoplastics (190 or 230C/2.16 kg) - g/10 mins

Grand Mean Sample X01: 12.461 grams/10 mins Grand Mean Sample X02: 12.624 grams/10 mins





Plastics Interlaboratory Testing Program

Analysis 755

Moisture Content of Plastics

Report #130

2nd Qtr 2024

WebCode	Data Flag	Sample Y01			Sample Y02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
24MPR3		0.03333	-0.09007	-2.24	0.02667	-0.09728	-2.37	XX
36E6FJ		0.12633	0.00293	0.07	0.12833	0.00439	0.11	BA
384ACW		0.11030	-0.01311	-0.33	0.11097	-0.01298	-0.32	MU
6HuzRL		0.10750	-0.01591	-0.40	0.10600	-0.01795	-0.44	MU
7C6PAB		0.11783	-0.00557	-0.14	0.11720	-0.00675	-0.16	AZ
7F6Z6A		0.08533	-0.03807	-0.95	0.08100	-0.04295	-1.05	CT
8AWWTG		0.08333	-0.04007	-1.00	0.08667	-0.03728	-0.91	MU
BD3LUD		0.13317	0.00976	0.24	0.13477	0.01082	0.26	ML
BEA4KW		0.12900	0.00559	0.14	0.12923	0.00529	0.13	AZ
BMRC9T		0.11400	-0.00941	-0.23	0.12200	-0.00195	-0.05	BA
CGUHLC		0.08333	-0.04007	-1.00	0.08667	-0.03728	-0.91	AZ
CNWEFA		0.15330	0.02989	0.74	0.14823	0.02429	0.59	MK
CPE7RE		0.13333	0.00993	0.25	0.11767	-0.00628	-0.15	MU
CWAFTX		0.12433	0.00093	0.02	0.12900	0.00505	0.12	MU
DJJ4UT		0.12900	0.00559	0.14	0.13700	0.01305	0.32	MU
DNWN2E		0.11197	-0.01144	-0.28	0.12537	0.00142	0.03	MD
FQCX6W	*	0.22140	0.09799	2.44	0.20133	0.07739	1.88	MU
H3HPMM		0.13460	0.01119	0.28	0.14783	0.02389	0.58	BA
J4NUDF		0.12250	-0.00091	-0.02	0.11750	-0.00645	-0.16	SB
K82PZ6	*	0.00001	-0.12340	-3.07	0.00001	-0.12394	-3.02	AZ
KTGCFH		0.13500	0.01159	0.29	0.14000	0.01605	0.39	MU
L2CPWX		0.11000	-0.01341	-0.33	0.10700	-0.01695	-0.41	MU
L323FF		0.14753	0.02413	0.60	0.13700	0.01305	0.32	AZ
P3UTHZ		0.15300	0.02959	0.74	0.12833	0.00439	0.11	MU
P6H7ZH		0.20667	0.08326	2.07	0.21433	0.09039	2.20	CT
RK8B3V		0.13850	0.01509	0.38	0.12423	0.00029	0.01	CT
TQ9WKX		0.13713	0.01372	0.34	0.15858	0.03463	0.84	BA
ULUE3G		0.13767	0.01426	0.36	0.14433	0.02039	0.50	CS
XV6A9H	*	0.15333	0.02993	0.75	0.18533	0.06139	1.49	XX
YD3KZR		0.12733	0.00393	0.10	0.12867	0.00472	0.11	AZ
YTRW6L		0.11467	-0.00874	-0.22	0.10767	-0.01628	-0.40	AZ
ZCYLUN		0.13433	0.01093	0.27	0.13733	0.01339	0.33	MU



Plastics Interlaboratory Testing Program

Analysis 755

Report #130

2nd Qtr 2024

Moisture Content of Plastics

Summary Statistics	Sample Y01	Sample Y02
Grand Means	0.123408 Percent	0.123945 Percent
Stnd Dev Btwn Labs	0.040159 Percent	0.041088 Percent

Statistics based on 32 of 32 reporting participants

Sample Y01: ABS & Sample Y02: ABS

Results by Methodology (as reported by laboratory)

Test Methodology	Sample Y01 ABS			Sample Y02 ABS			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
ASTM D6869	0.136467	0.037300	0.0131	0.136015	0.029574	0.0121	9/9
ISO 15512 Method B	0.126733	0.020812	0.0033	0.120967	0.018703	-0.0030	4/4
ASTM D6980	0.118667	0.046541	-0.0047	0.120113	0.053084	-0.0038	10/10
ASTM D7191	0.103808	0.059043	-0.0196	0.102241	0.057583	-0.0217	5/5

Key to Instrument Codes Reported by Participants

AZ	Arizona Instruments Moisture Analyzer	BA	Brabender Aquatrac
CS	Cosa Instruments	CT	Computrac Moisture Analyzer
MD	Mettler Toledo DL37	MK	Mitsubishi KF Analyzer CA
ML	Metrohm Coulometer	MU	Mettler Toledo
SB	Sartorius Mark 3	XX	Instrument manufacturer not specified by lab



Plastics Interlaboratory Testing Program

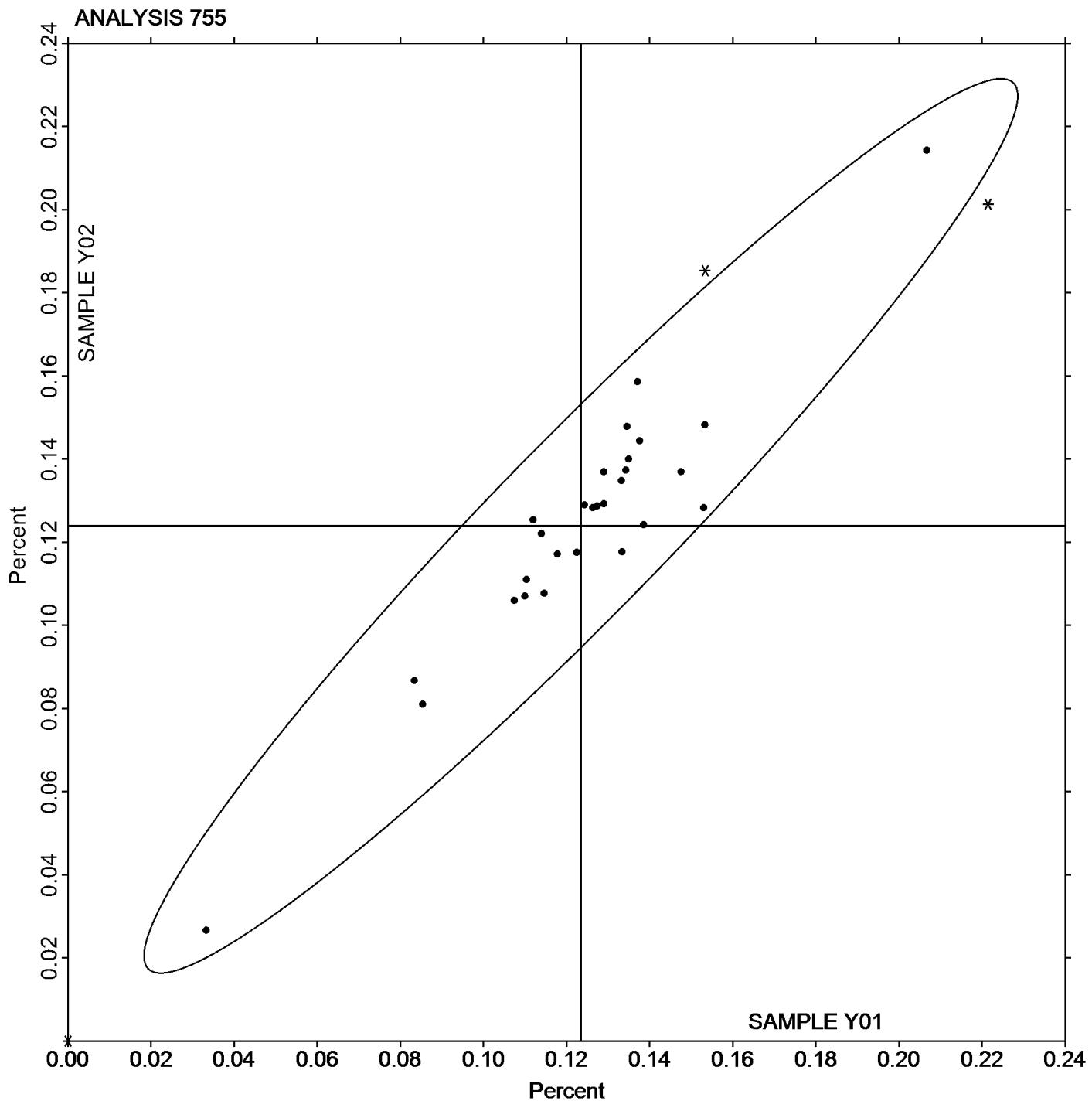
Analysis 755

Moisture Content of Plastics

Report #130

2nd Qtr 2024

Grand Mean Sample Y01: 0.12341 Percent Grand Mean Sample Y02: 0.12395 Percent





Plastics Interlaboratory Testing Program

Analysis 757

Report #130

2nd Qtr 2024

Ash Content in Thermoplastics - Percent

WebCode	Data Flag	Sample L01			Sample L02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
24MPR3	X	34.227	4.552	58.47	36.278	6.585	93.17
384ACW		29.710	0.035	0.45	29.691	-0.002	-0.03
3MCM8Z	X	31.660	1.985	25.50	31.690	1.997	28.25
3RP9DL		29.630	-0.045	-0.57	29.710	0.017	0.24
4D2LLY		29.675	0.000	0.01	29.695	0.002	0.03
66UYEK		29.799	0.124	1.59	29.708	0.015	0.21
7F6Z6A		29.710	0.035	0.46	29.760	0.067	0.95
823Q22	X	28.855	-0.820	-10.53	29.775	0.082	1.16
8T9JGA		29.633	-0.042	-0.54	29.634	-0.059	-0.84
9CZXJ7		29.681	0.006	0.08	29.700	0.007	0.10
A8U6CC		29.635	-0.040	-0.51	29.560	-0.133	-1.88
BD3LUD		29.760	0.085	1.10	29.760	0.067	0.95
CGUHLC		29.730	0.055	0.71	29.810	0.117	1.66
CNEDRL	X	29.925	0.250	3.22	30.195	0.502	7.10
CNWEFA		29.650	-0.025	-0.32	29.650	-0.043	-0.61
CPE7RE		29.600	-0.075	-0.96	29.570	-0.123	-1.74
CWAFTX	X	29.745	0.070	0.91	28.585	-1.108	-15.68
DGR86Y		29.643	-0.032	-0.41	29.598	-0.095	-1.34
H3HPMM		29.750	0.075	0.97	29.710	0.017	0.24
KLMX4X		29.715	0.040	0.52	29.680	-0.013	-0.18
L323FF		29.525	-0.150	-1.92	29.650	-0.043	-0.61
M2A7QL		29.620	-0.055	-0.70	29.600	-0.093	-1.32
MZCXH3		29.715	0.040	0.52	29.680	-0.013	-0.18
NGX2DW		29.700	0.025	0.33	29.695	0.002	0.03
NHBBQ3		29.730	0.055	0.71	29.730	0.037	0.52
NHPW3Q		29.700	0.025	0.33	29.685	-0.008	-0.11
NJM6BA		29.625	-0.050	-0.64	29.640	-0.053	-0.75
NVFKGX		29.685	0.010	0.13	29.728	0.035	0.50
P3UTHZ		29.680	0.005	0.07	29.750	0.057	0.81
PYTTYU		29.685	0.010	0.13	29.730	0.037	0.52
QRP7KY		29.635	-0.040	-0.51	29.665	-0.028	-0.40
RK8B3V		29.755	0.080	1.03	29.715	0.022	0.31
T4WY3P		29.760	0.085	1.10	29.710	0.017	0.24
TQ9WKX	X	29.376	-0.299	-3.84	29.372	-0.321	-4.54
TQKNCE		29.765	0.090	1.16	29.650	-0.043	-0.61



Plastics Interlaboratory Testing Program

Analysis 757

Report #130

2nd Qtr 2024

Ash Content in Thermoplastics - Percent

WebCode	Data Flag	Sample L01			Sample L02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
TRYVXW	*	29.790	0.115	1.48	29.880	0.187	2.65
U3X8AF		29.700	0.025	0.33	29.700	0.007	0.10
UKGZGT	*	29.475	-0.200	-2.56	29.640	-0.053	-0.75
ULUE3G		29.635	-0.040	-0.51	29.795	0.102	1.44
UPBRVG		29.615	-0.060	-0.76	29.615	-0.078	-1.10
VX4JGF		29.715	0.040	0.52	29.760	0.067	0.95
W3AGJT		29.640	-0.035	-0.44	29.605	-0.088	-1.24
WDQBNU	*	29.500	-0.175	-2.24	29.500	-0.193	-2.73
WFGCW3		29.580	-0.095	-1.21	29.715	0.022	0.31
X3PZ4Q		29.735	0.060	0.78	29.760	0.067	0.95
XE2DBT		29.735	0.060	0.78	29.710	0.017	0.24
XMB2NR		29.735	0.060	0.78	29.740	0.047	0.67
XV6A9H	*	29.465	-0.210	-2.69	29.645	-0.048	-0.68
YD3KZR		29.735	0.060	0.78	29.755	0.062	0.88
YTDBVJ		29.705	0.030	0.39	29.770	0.077	1.09
YVJTTF	X	29.500	-0.175	-2.24	29.325	-0.368	-5.21
Z96D2F	X	29.540	-0.135	-1.73	29.375	-0.318	-4.50
ZCYLUN		29.695	0.020	0.26	29.730	0.037	0.52

Summary Statistics

Sample L01

Sample L02

Grand Means

29.6745 Percent

29.6930 Percent

Stnd Dev Btwn Labs

0.0778 Percent

0.0707 Percent

Statistics based on 45 of 53 reporting participants

Sample L01: PBT & Sample L02: PBT

Comments on Assigned Data Flags for Test #757

Z96D2F (X) - Data for sample L02 are low. Inconsistent within the determinations of both samples.

TQ9WKX (X) - Data for both samples are low.

CWAFTX (X) - Data for sample L02 are low.

823Q22 (X) - Data for sample L01 are low.

YVJTTF (X) - Data for sample L02 are low. Inconsistent within the determinations of sample L01.

CNEDRL (X) - Data for both samples are high.

24MPR3 (X) - Extreme data.

3MCM8Z (X) - Extreme data.



Plastics Interlaboratory Testing Program

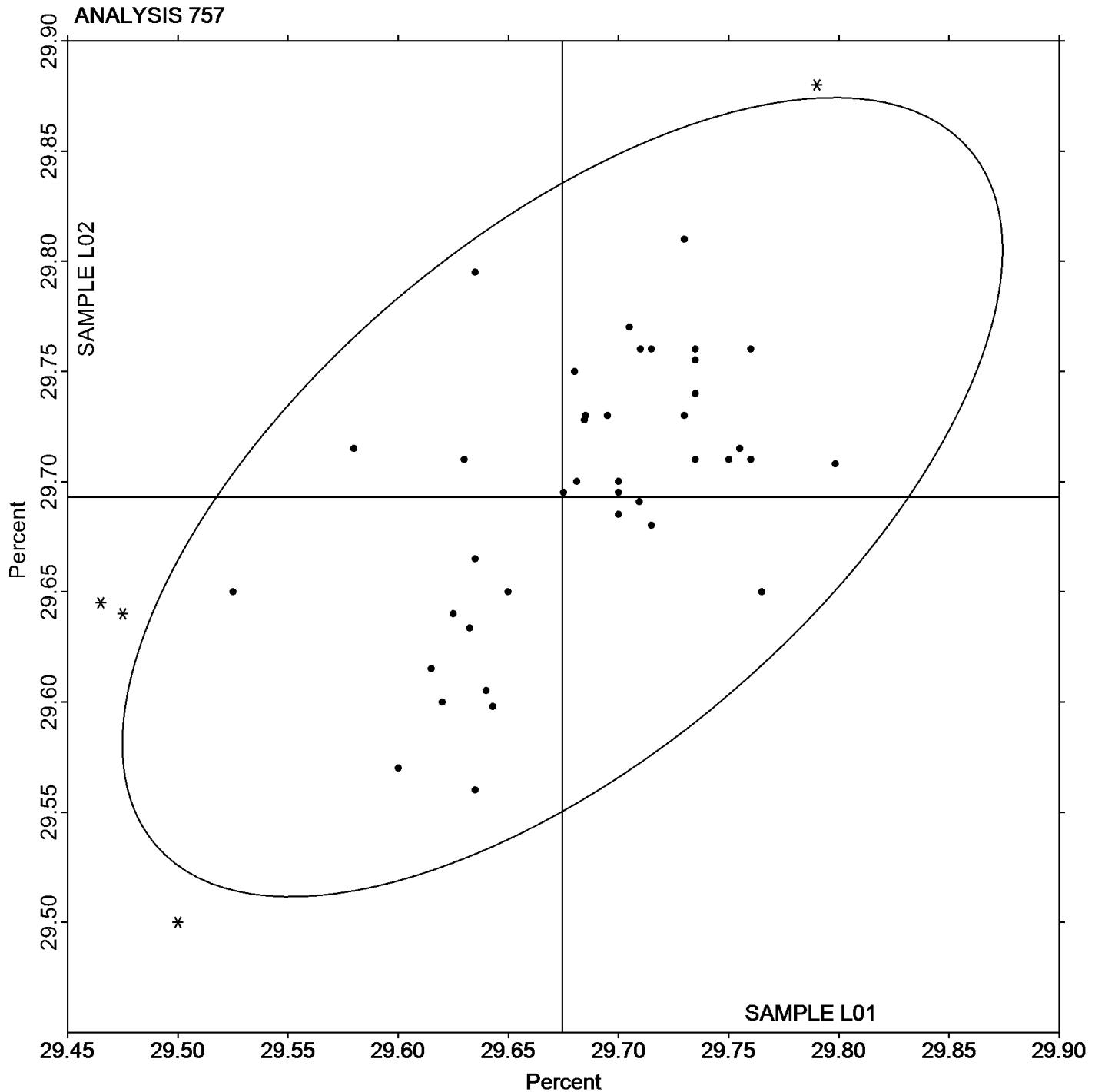
Analysis 757

Ash Content in Thermoplastics - Percent

Report #130

2nd Qtr 2024

Grand Mean Sample L01: 29.675 Percent Grand Mean Sample L02: 29.693 Percent





Plastics Interlaboratory Testing Program

Analysis 758

Thermogravimetric Analysis

Report #130

2nd Qtr 2024

WebCode	Data Flag	Sample A01			Sample A02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
BD3LUD		79.50	0.31	0.68	79.49	0.24	0.89	TA
BF9ZH8		78.98	-0.22	-0.49	79.16	-0.09	-0.33	TA
CWAFTX		79.35	0.15	0.33	79.39	0.14	0.53	TA
FCV3PZ	*	78.02	-1.18	-2.63	79.39	0.14	0.53	TA
KY8LPG	X	76.51	-2.69	-6.00	73.44	-5.81	-21.49	TA
L8ENL2		79.13	-0.07	-0.15	78.87	-0.37	-1.38	XX
LZVHPU		79.05	-0.15	-0.33	79.43	0.18	0.67	TA
M2A7QL		79.64	0.44	0.98	78.89	-0.36	-1.32	TA
PYTTYU		79.24	0.04	0.09	79.29	0.04	0.14	TA
QCT32U		79.45	0.26	0.57	79.45	0.20	0.75	TA
RK8B3V		79.34	0.14	0.31	79.48	0.23	0.85	TA
RR6YZM		79.87	0.67	1.50	79.74	0.49	1.80	TA
TQ9WKX		79.39	0.19	0.43	79.35	0.10	0.38	XX
TRYVXW	X	79.00	-0.19	-0.44	82.87	3.62	13.37	XX
U93P6V		79.07	-0.13	-0.29	79.08	-0.17	-0.64	TA
WDQBNU		79.68	0.48	1.07	79.23	-0.02	-0.07	PE
X3PZ4Q		78.44	-0.76	-1.70	78.85	-0.40	-1.47	TA
Y4QPEX		79.00	-0.19	-0.43	79.36	0.11	0.40	TA
ZU3YT6		79.22	0.03	0.06	78.78	-0.47	-1.73	TA

Summary Statistics

Sample A01

Sample A02

Grand Means

79.195 Percent

79.248 Percent

Stnd Dev Btwn Labs

0.448 Percent

0.271 Percent

Statistics based on 17 of 19 reporting participants

Sample A01: PP & Sample A02: PP

Comments on Assigned Data Flags for Test #758

TRYVXW (X) - Data for sample A02 are high. Inconsistent within the determinations of both samples.

KY8LPG (X) - Data for both samples are low.

Results by Methodology (as reported by laboratory)

Test Methodology	Sample A01 PP			Sample A02 PP			Labs Incl / Rpt
	Group Mean	Btwn Lab STD	Diff from GM	Group Mean	Btwn Lab STD	Diff from GM	
ASTM D3850	78.959	0.556	-0.24	79.228	0.248	-0.02	7/8
ISO 11358	79.386	0.301	0.19	79.300	0.299	0.05	8/8



Plastics Interlaboratory Testing Program
Analysis 758
Thermogravimetric Analysis

Report #130
2nd Qtr 2024

Key to Instrument Codes Reported by Participants

- PE** Perkins Elmer Instruments **TA** TA Instruments
XX Instrument manufacturer not specified by lab



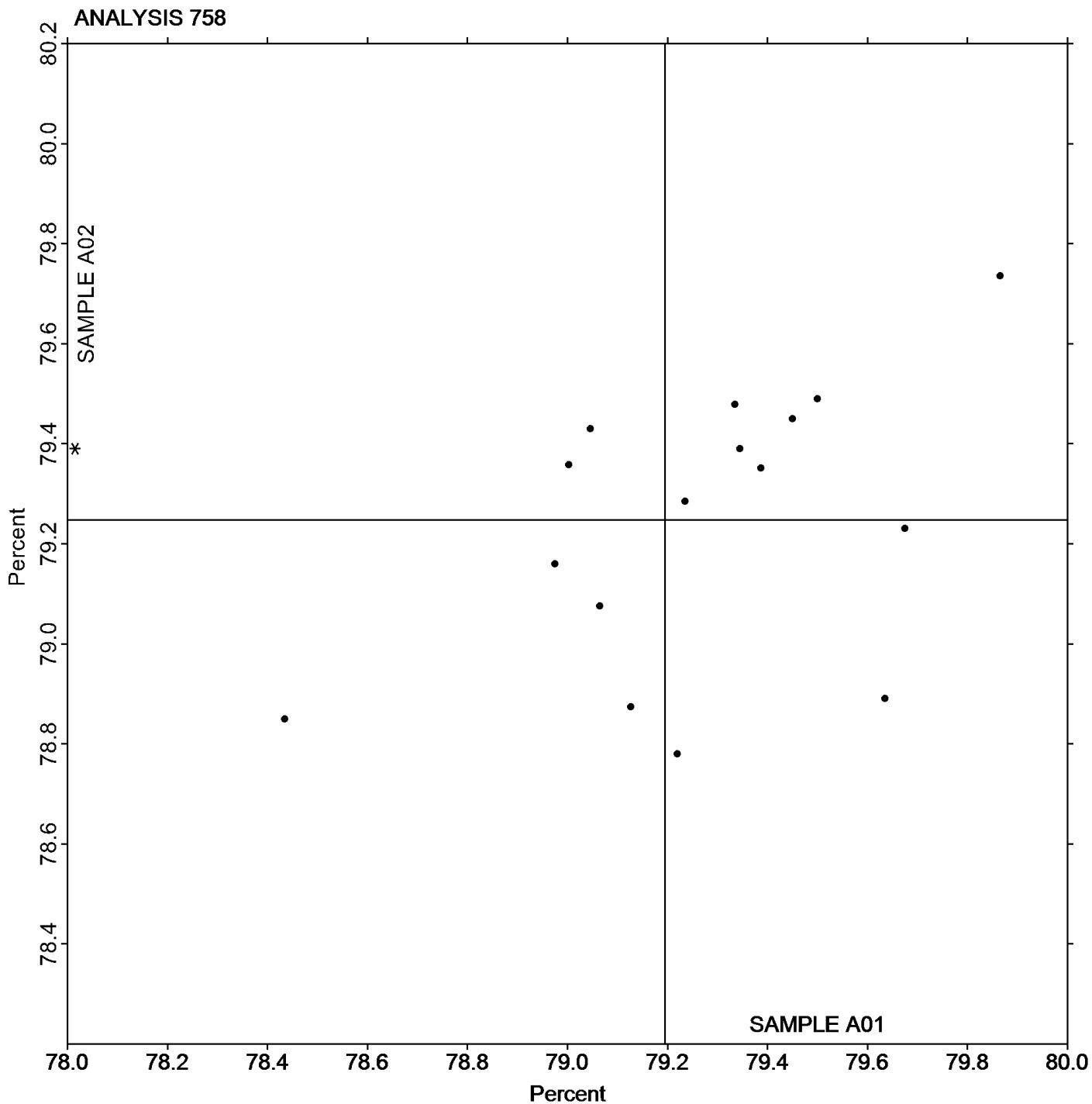
Plastics Interlaboratory Testing Program

Analysis 758 Thermogravimetric Analysis

Report #130

2nd Qtr 2024

Grand Mean Sample A01: 79.195 Percent Grand Mean Sample A02: 79.248 Percent



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Plastics Interlaboratory Testing Program

Analysis 760

Report #130

2nd Qtr 2024

DSC Crystallization Temperature

WebCode	Data Flag	Sample W01			Sample W02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2Q2AN4		168.94	-4.27	-0.90	168.67	-4.54	-0.96	TA
384ACW		179.10	5.88	1.23	179.47	6.27	1.32	TA
3RP9DL		180.94	7.72	1.62	180.81	7.60	1.61	TA
44CWNB		170.63	-2.58	-0.54	170.53	-2.68	-0.57	TA
8FX9QY		178.03	4.82	1.01	177.67	4.46	0.94	MT
8LTXFJ		180.47	7.25	1.52	179.99	6.78	1.43	SH
9CZXJ7		178.97	5.75	1.21	179.48	6.27	1.32	TA
9MBGRZ	X	173.68	0.46	0.10	169.19	-4.02	-0.85	TA
9P3F7Y	X	222.60	49.38	10.35	222.51	49.30	10.41	TA
BEA4KW		176.42	3.21	0.67	176.40	3.20	0.67	TA
BF9ZH8		168.23	-4.99	-1.05	169.23	-3.98	-0.84	TA
DNWN2E		175.33	2.11	0.44	175.22	2.01	0.42	TA
EYPHW9		169.68	-3.54	-0.74	169.68	-3.52	-0.74	TA
F37B38		168.47	-4.75	-1.00	168.20	-5.01	-1.06	NZ
HZTC64	*	185.86	12.64	2.65	185.76	12.56	2.65	TA
JL44EG		172.47	-0.75	-0.16	172.43	-0.77	-0.16	NZ
JLNKUJ		169.97	-3.24	-0.68	170.58	-2.63	-0.56	TA
JQGNL3		167.97	-5.24	-1.10	168.57	-4.63	-0.98	MT
KY8LPG		170.64	-2.57	-0.54	169.92	-3.29	-0.69	TA
M2A7QL		170.33	-2.88	-0.60	170.13	-3.07	-0.65	TA
NGX2DW	X	222.03	48.82	10.23	221.80	48.59	10.26	MT
NJM6BA		172.85	-0.37	-0.08	172.83	-0.38	-0.08	PE
PPRE4N		169.20	-4.02	-0.84	169.06	-4.14	-0.88	PE
PYTTYU		172.10	-1.11	-0.23	171.65	-1.55	-0.33	TA
QCT32U		169.75	-3.46	-0.73	169.41	-3.80	-0.80	TA
RK8B3V		174.36	1.14	0.24	175.28	2.07	0.44	TA
RR6YZM		168.07	-5.15	-1.08	168.57	-4.64	-0.98	TA
TQ9WKX		168.67	-4.55	-0.95	168.80	-4.41	-0.93	XX
TRYVXW		175.59	2.37	0.50	174.77	1.56	0.33	TA
U93P6V		177.02	3.80	0.80	177.07	3.86	0.81	TA
W3AGJT		177.97	4.75	1.00	178.27	5.06	1.07	TA
WDQBNU		170.23	-2.98	-0.63	170.17	-3.04	-0.64	NZ
X3PZ4Q		170.60	-2.62	-0.55	170.53	-2.67	-0.56	TA
XV6A9H		167.00	-6.22	-1.30	166.87	-6.34	-1.34	NZ
Y4QPEX		177.07	3.85	0.81	176.63	3.43	0.72	TA



Plastics Interlaboratory Testing Program
Analysis 760
DSC Crystallization Temperature

Report #130
2nd Qtr 2024

Summary Statistics

Sample W01

Sample W02

Grand Means

173.216 Degrees Celsius

173.208 Degrees Celsius

Stnd Dev Btwn Labs

4.772 Degrees Celsius

4.736 Degrees Celsius

Statistics based on 32 of 35 reporting participants

Sample W01: PBT & Sample W02: PBT

Comments on Assigned Data Flags for Test #760

NGX2DW (X) - Data for both samples are high.

9MBGRZ (X) - Inconsistent in testing between samples. Inconsistent within the determinations of both samples.

9P3F7Y (X) - Data for both samples are high.

Key to Instrument Codes Reported by Participants

MT Mettler Toledo Instruments

NZ Netzsch Instruments

PE Perkins Elmer Instruments

SH Shimadzu

TA TA Instruments

XX Instrument manufacturer not specified by lab



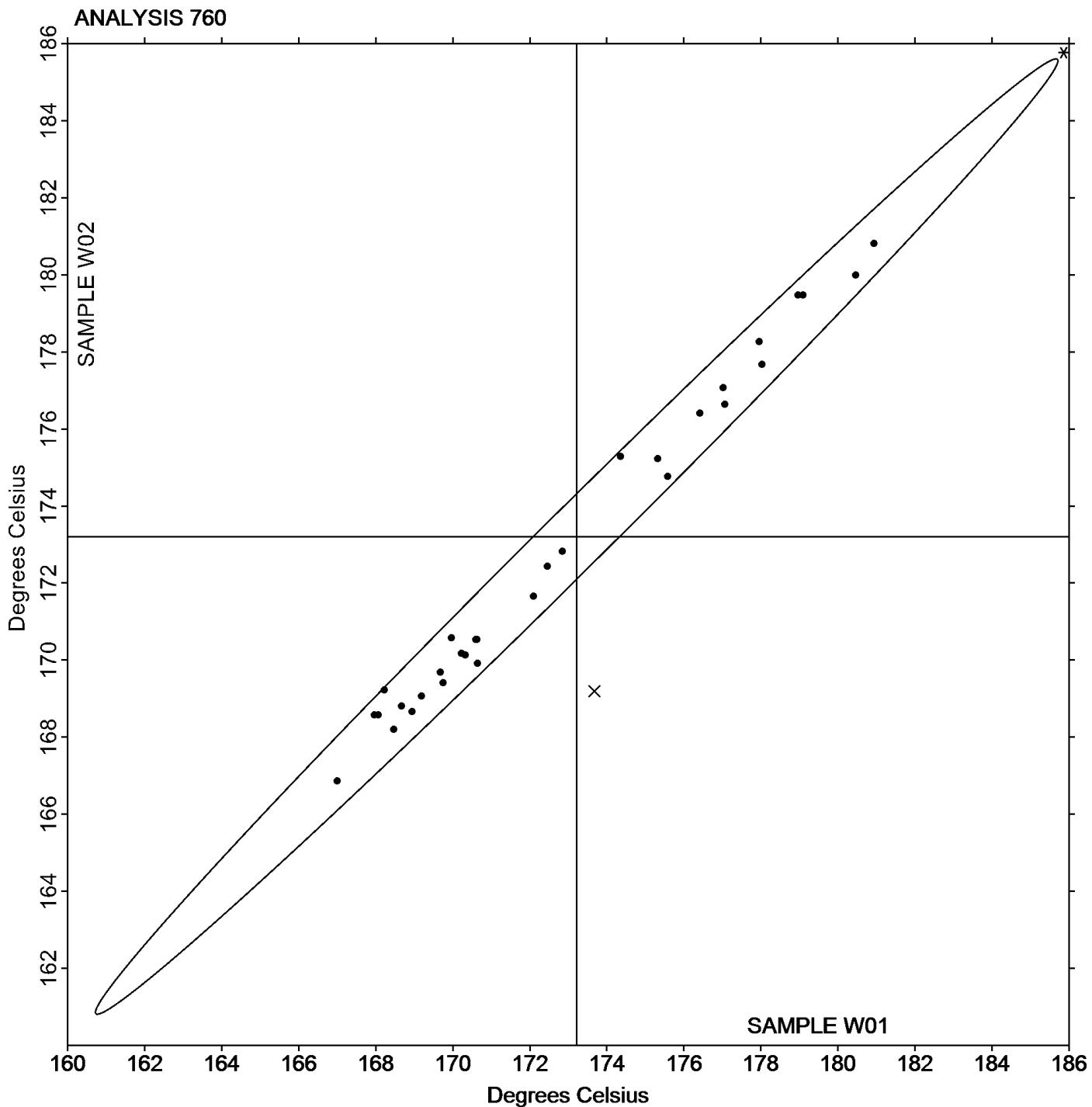
Plastics Interlaboratory Testing Program

Analysis 760 DSC Crystallization Temperature

Report #130

2nd Qtr 2024

Grand Mean Sample W01: 173.22 Degrees Celsius Grand Mean Sample W02: 173.21 Degrees Celsius





Plastics Interlaboratory Testing Program

Report #130

Analysis 761

2nd Qtr 2024

DSC Melt Temperature

WebCode	Data Flag	Sample W01			Sample W02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2Q2AN4		224.04	0.40	0.27	223.94	0.38	0.25	TA
36E6FJ		221.37	-2.27	-1.54	221.23	-2.32	-1.55	TA
384ACW		222.26	-1.38	-0.94	222.08	-1.47	-0.98	TA
3RP9DL		224.01	0.37	0.25	223.98	0.43	0.29	XX
44CWNB		223.76	0.12	0.08	224.30	0.75	0.50	TA
8FX9QY	*	221.03	-2.61	-1.77	221.84	-1.71	-1.14	MT
8LTXFJ		221.94	-1.70	-1.15	221.20	-2.36	-1.57	SH
9CZXJ7		224.51	0.87	0.59	224.33	0.77	0.51	XX
9MBGRZ	*	227.69	4.05	2.75	227.70	4.14	2.76	TA
BD3LUD	*	225.24	1.60	1.08	223.99	0.44	0.29	TA
BEA4KW		223.20	-0.44	-0.30	223.21	-0.35	-0.23	TA
BF9ZH8	*	224.99	1.35	0.91	223.74	0.18	0.12	TA
CNWEFA		223.40	-0.24	-0.16	223.51	-0.04	-0.03	TA
DNWN2E		223.80	0.16	0.11	223.62	0.06	0.04	TA
EYPHW9		225.57	1.93	1.30	225.54	1.98	1.32	TA
F37B38		222.20	-1.44	-0.98	222.13	-1.42	-0.95	NZ
HZTC64	X	212.99	-10.65	-7.22	212.99	-10.57	-7.05	TA
JL44EG		221.63	-2.01	-1.36	221.63	-1.92	-1.28	NZ
JLNKUJ		222.67	-0.97	-0.66	222.32	-1.23	-0.82	TA
JQGNL3		222.84	-0.80	-0.54	222.23	-1.33	-0.88	MT
KY8LPG		221.65	-1.99	-1.35	221.83	-1.73	-1.15	TA
L323FF		226.69	3.05	2.07	227.17	3.61	2.41	TA
M2A7QL		223.50	-0.14	-0.10	223.63	0.08	0.05	TA
NJM6BA	X	229.72	6.08	4.12	229.52	5.96	3.98	PE
NVFKGX		223.43	-0.21	-0.14	223.60	0.05	0.03	TA
PPRE4N		222.47	-1.17	-0.79	222.15	-1.41	-0.94	PE
PYTTYU		224.45	0.81	0.55	224.43	0.87	0.58	TA
QCT32U		224.01	0.37	0.25	224.67	1.11	0.74	TA
RK8B3V		223.93	0.29	0.20	223.75	0.19	0.13	TA
RR6YZM		224.13	0.49	0.33	224.10	0.54	0.36	TA
TQ9WKX		223.44	-0.20	-0.14	223.50	-0.06	-0.04	XX
TRYVXW		222.47	-1.17	-0.80	222.90	-0.66	-0.44	TA
U93P6V		224.24	0.60	0.41	224.15	0.59	0.39	TA
W3AGJT		225.10	1.46	0.99	224.83	1.28	0.85	TA
WDQBNU		225.47	1.83	1.24	225.30	1.74	1.16	NZ



Plastics Interlaboratory Testing Program

Analysis 761

DSC Melt Temperature

Report #130

2nd Qtr 2024

WebCode	Data Flag	Sample W01			Sample W02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
X3PZ4Q		222.10	-1.54	-1.04	221.73	-1.82	-1.22	TA
XV6A9H		224.33	0.69	0.47	224.67	1.11	0.74	NZ
Y4QPEX		223.51	-0.13	-0.09	223.07	-0.49	-0.32	TA

Summary Statistics	Sample W01	Sample W02
Grand Means	223.641 Degrees Celsius	223.556 Degrees Celsius
Stnd Dev Btwn Labs	1.476 Degrees Celsius	1.498 Degrees Celsius
Statistics based on 36 of 38 reporting participants		

Sample W01: PBT & Sample W02: PBT

Comments on Assigned Data Flags for Test #761

HZTC64 (X) - Data for both samples are low. Possible Systematic Error.

NJM6BA (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of both samples.

Key to Instrument Codes Reported by Participants

MT Mettler Toledo Instruments

NZ Netzsch Instruments

PE Perkins Elmer Instruments

SH Shimadzu

TA TA Instruments

XX Instrument manufacturer not specified by lab



Plastics Interlaboratory Testing Program

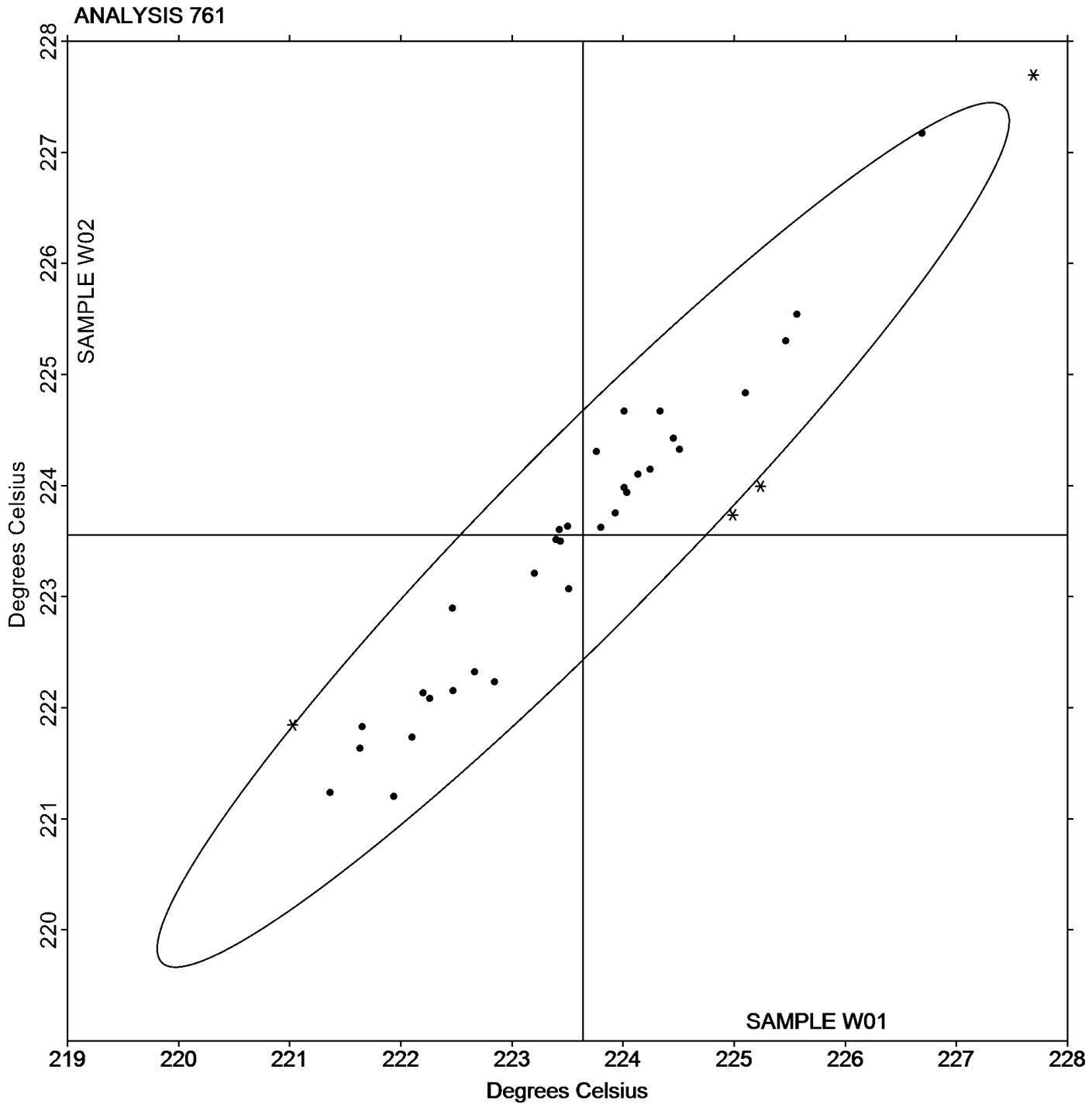
Analysis 761

DSC Melt Temperature

Report #130

2nd Qtr 2024

Grand Mean Sample W01: 223.64 Degrees Celsius Grand Mean Sample W02: 223.56 Degrees Celsius





Plastics Interlaboratory Testing Program

Analysis 762

DSC Enthalpy of Crystallization

Report #130

2nd Qtr 2024

WebCode	Data Flag	Sample W01			Sample W02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2Q2AN4		56.92	10.57	2.06	55.70	9.32	1.88	XX
384ACW		49.65	3.31	0.64	49.65	3.27	0.66	TA
44CWNB		44.12	-2.23	-0.43	44.95	-1.44	-0.29	TA
8FX9QY	*	52.31	5.97	1.16	55.52	9.13	1.84	XX
9MBGRZ		40.60	-5.75	-1.12	39.95	-6.44	-1.30	TA
BF9ZH8	*	36.74	-9.60	-1.87	40.00	-6.38	-1.29	XX
DNWN2E		38.94	-7.40	-1.44	38.47	-7.92	-1.60	TA
EYPHW9		41.34	-5.01	-0.97	40.34	-6.05	-1.22	TA
F37B38		47.57	1.22	0.24	45.02	-1.36	-0.28	XX
HZTC64		49.08	2.73	0.53	49.60	3.21	0.65	TA
JL44EG		44.81	-1.54	-0.30	44.91	-1.48	-0.30	NZ
JLNKUJ		45.23	-1.12	-0.22	44.45	-1.94	-0.39	TA
JQGNL3		58.21	11.87	2.31	56.57	10.19	2.06	MT
KY8LPG	X	63.42	17.07	3.32	66.30	19.91	4.02	TA
M2A7QL		45.79	-0.55	-0.11	45.79	-0.60	-0.12	TA
NJM6BA		46.34	0.00	0.00	47.04	0.65	0.13	PE
PPRE4N		40.43	-5.92	-1.15	40.36	-6.03	-1.22	PE
PYTTYU		46.85	0.51	0.10	46.24	-0.14	-0.03	TA
QCT32U		44.46	-1.88	-0.37	43.61	-2.78	-0.56	TA
RK8B3V		46.31	-0.04	-0.01	47.28	0.89	0.18	TA
RR6YZM		53.09	6.74	1.31	52.85	6.46	1.31	TA
TQ9WKX		44.95	-1.40	-0.27	44.98	-1.40	-0.28	XX
TRYVXW		46.20	-0.14	-0.03	47.16	0.78	0.16	TA
U93P6V		52.47	6.12	1.19	51.86	5.47	1.11	TA
WDQBNU		44.97	-1.38	-0.27	45.12	-1.27	-0.26	NZ
X3PZ4Q		46.44	0.10	0.02	46.53	0.14	0.03	TA
XV6A9H		40.14	-6.21	-1.21	41.11	-5.28	-1.07	NZ
Y4QPEX		47.37	1.03	0.20	47.41	1.02	0.21	TA

Summary Statistics

Sample W01

Sample W02

Grand Means

46.346 Joules Per Gram

46.388 Joules Per Gram

Stnd Dev Btwn Labs

5.141 Joules Per Gram

4.949 Joules Per Gram

Statistics based on 27 of 28 reporting participants

Sample W01: PBT & Sample W02: PBT



Plastics Interlaboratory Testing Program
Analysis 762
DSC Enthalpy of Crystallization

Report #130
2nd Qtr 2024

Comments on Assigned Data Flags for Test #762

KY8LPG (X) - Data for both samples are high. Possible Systematic Error. Inconsistent within the determinations of both samples.

Key to Instrument Codes Reported by Participants

MT Mettler Toledo Instruments

NZ Netzsch Instruments

PE Perkins Elmer Instruments

TA TA Instruments

XX Instrument manufacturer not specified by lab



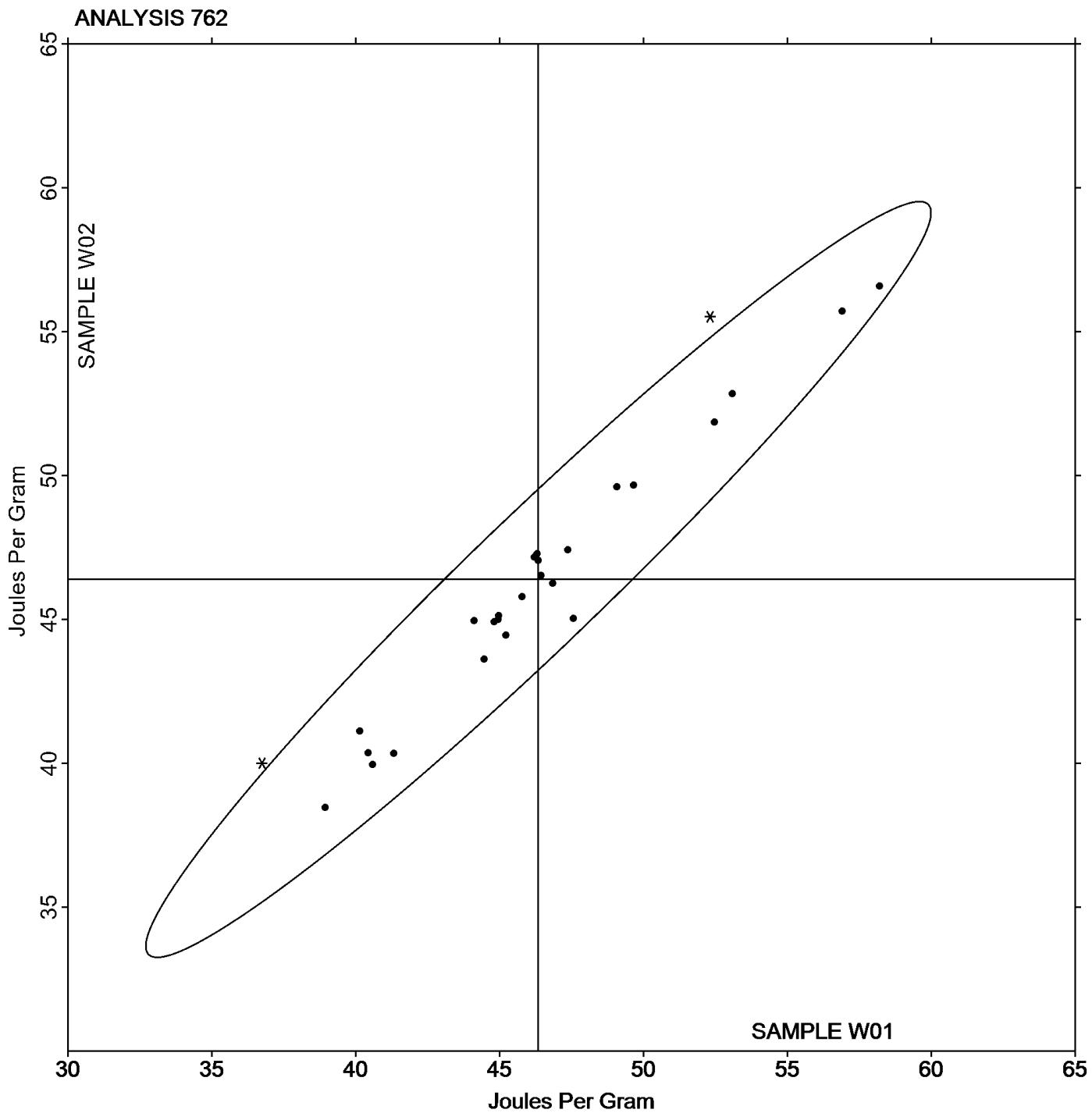
Plastics Interlaboratory Testing Program

Analysis 762 DSC Enthalpy of Crystallization

Report #130

2nd Qtr 2024

Grand Mean Sample W01: 46.346 Joules Per Gram Grand Mean Sample W02: 46.388 Joules Per Gram





Plastics Interlaboratory Testing Program

Analysis 763

DSC Enthalpy of Fusion

Report #130

2nd Qtr 2024

WebCode	Data Flag	Sample W01			Sample W02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2Q2AN4		44.67	2.73	0.40	43.60	1.22	0.18	TA
384ACW		53.54	11.59	1.69	53.71	11.33	1.68	TA
44CWNB		37.97	-3.98	-0.58	36.84	-5.54	-0.82	TA
8FX9QY	*	44.83	2.88	0.42	49.05	6.67	0.99	XX
9MBGRZ		37.67	-4.28	-0.63	38.23	-4.15	-0.61	TA
BF9ZH8		30.61	-11.33	-1.65	33.31	-9.07	-1.34	XX
DNWN2E		38.03	-3.92	-0.57	40.21	-2.17	-0.32	TA
EYPHW9		42.42	0.48	0.07	43.01	0.63	0.09	TA
F37B38		40.89	-1.05	-0.15	39.80	-2.58	-0.38	NZ
HZTC64		47.06	5.11	0.75	46.73	4.35	0.64	TA
JL44EG		44.99	3.04	0.44	45.14	2.76	0.41	NZ
JLNKUJ		39.07	-2.88	-0.42	39.77	-2.61	-0.39	TA
JQGNL3		43.82	1.87	0.27	44.37	1.99	0.29	MT
KY8LPG	*	60.17	18.22	2.66	61.68	19.30	2.85	TA
M2A7QL		50.38	8.43	1.23	49.34	6.96	1.03	TA
NJM6BA		29.67	-12.28	-1.79	32.04	-10.34	-1.53	PE
PPRE4N		34.86	-7.08	-1.03	34.77	-7.61	-1.13	PE
PYTTYU		47.32	5.38	0.78	46.60	4.22	0.62	TA
QCT32U		40.77	-1.18	-0.17	39.51	-2.87	-0.42	TA
RK8B3V		38.40	-3.55	-0.52	38.77	-3.61	-0.53	TA
RR6YZM		48.61	6.67	0.97	49.85	7.47	1.10	TA
TQ9WKX		40.23	-1.72	-0.25	40.09	-2.29	-0.34	XX
TRYVXW		36.95	-4.99	-0.73	39.01	-3.37	-0.50	TA
U93P6V		45.81	3.86	0.56	44.92	2.54	0.38	TA
WDQBNU		46.45	4.50	0.66	47.03	4.65	0.69	NZ
X3PZ4Q		40.71	-1.24	-0.18	40.14	-2.24	-0.33	TA
XV6A9H		31.36	-10.59	-1.55	30.82	-11.56	-1.71	NZ
Y4QPEX		37.28	-4.67	-0.68	38.30	-4.08	-0.60	TA

Summary Statistics

Sample W01

Sample W02

Grand Means

41.948 Joules Per Gram

42.379 Joules Per Gram

Stnd Dev Btwn Labs

6.849 Joules Per Gram

6.762 Joules Per Gram

Statistics based on 28 of 28 reporting participants

Sample W01: PBT & Sample W02: PBT



Plastics Interlaboratory Testing Program
Analysis 763
DSC Enthalpy of Fusion

Report #130
2nd Qtr 2024

Key to Instrument Codes Reported by Participants

MT Mettler Toledo Instruments

NZ Netzsch Instruments

PE Perkins Elmer Instruments

TA TA Instruments

XX Instrument manufacturer not specified by lab



Plastics Interlaboratory Testing Program

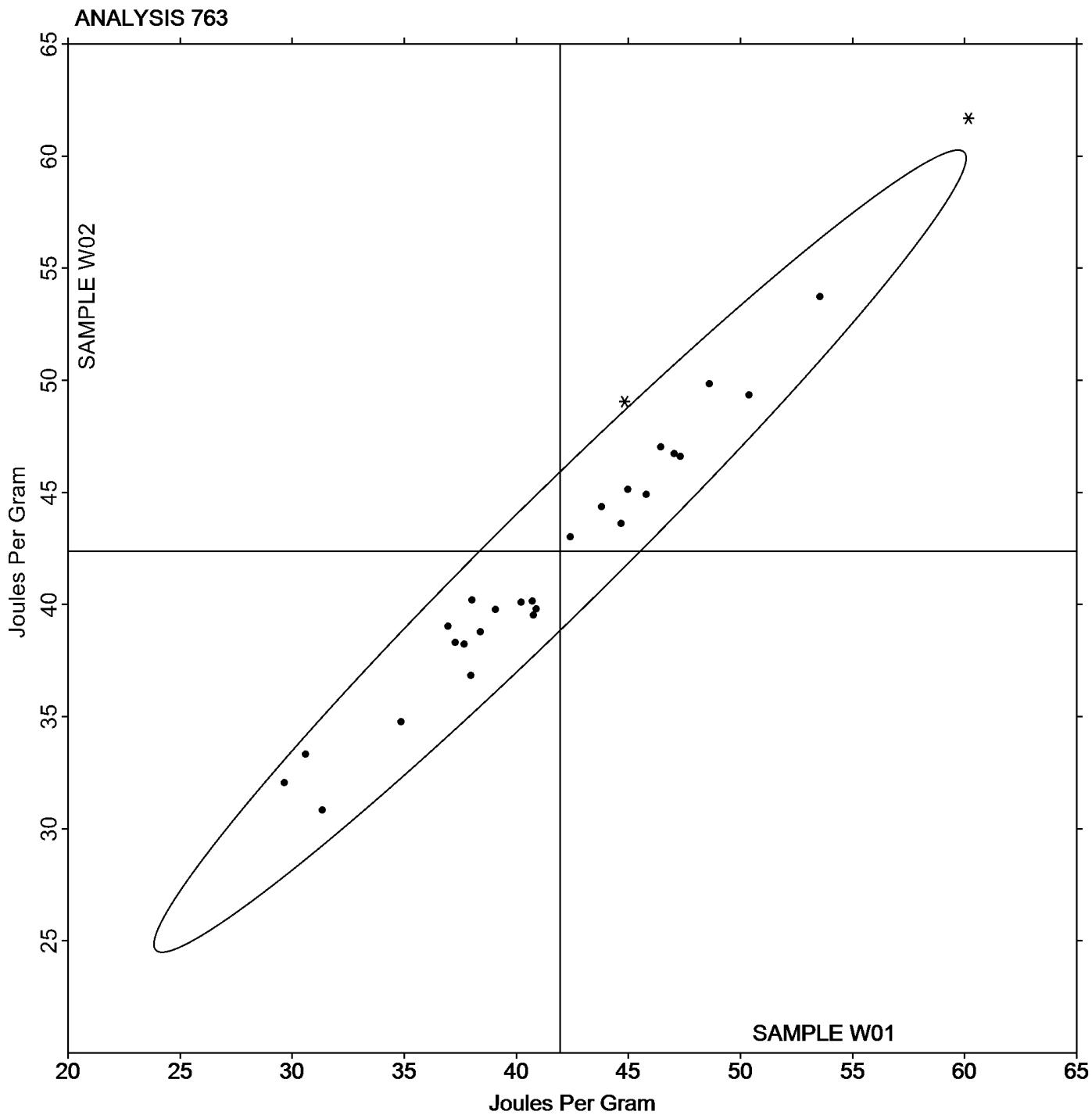
Analysis 763

DSC Enthalpy of Fusion

Report #130

2nd Qtr 2024

Grand Mean Sample W01: 41.948 Joules Per Gram Grand Mean Sample W02: 42.379 Joules Per Gram





Plastics Interlaboratory Testing Program

Analysis 764

Report #130

2nd Qtr 2024

DSC Glass Transition Temperature

WebCode	Data Flag	Sample V01			Sample V02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2Q2AN4		82.34	0.09	0.08	82.42	0.13	0.11	TA
384ACW		82.74	0.49	0.45	82.10	-0.20	-0.18	TA
44CWNB		82.58	0.33	0.30	82.27	-0.02	-0.02	TA
8FX9QY	X	69.13	-13.12	-12.05	69.05	-13.24	-12.07	MT
8LTXFJ	X	86.97	4.72	4.34	88.80	6.51	5.93	SH
9MBGRZ		80.35	-1.90	-1.74	80.72	-1.57	-1.43	TA
BEA4KW		81.11	-1.14	-1.05	81.15	-1.15	-1.05	MT
BF9ZH8		84.40	2.15	1.98	84.50	2.21	2.01	TA
DNWN2E		82.53	0.28	0.26	83.39	1.10	1.00	TA
EYPHW9	X	74.30	-7.95	-7.30	74.34	-7.95	-7.25	TA
F37B38		82.60	0.35	0.32	82.70	0.41	0.37	NZ
HZTC64	X	72.92	-9.33	-8.57	72.97	-9.32	-8.50	TA
JL44EG		81.43	-0.82	-0.75	80.57	-1.73	-1.57	NZ
JLNKUJ		82.20	-0.05	-0.04	82.05	-0.25	-0.23	TA
JQGNL3		80.49	-1.76	-1.61	81.18	-1.11	-1.02	MT
KY8LPG		81.62	-0.63	-0.58	82.06	-0.24	-0.22	TA
M2A7QL		82.07	-0.18	-0.17	81.50	-0.79	-0.72	TA
NJM6BA		83.55	1.30	1.20	83.93	1.64	1.49	PE
PPRE4N		82.00	-0.25	-0.23	81.81	-0.49	-0.44	PE
PYTTYU		82.71	0.46	0.42	83.51	1.21	1.11	TA
QCT32U		82.33	0.08	0.08	82.67	0.37	0.34	TA
RK8B3V		81.56	-0.69	-0.63	81.54	-0.75	-0.69	TA
RR6YZM		81.16	-1.09	-1.00	81.01	-1.29	-1.17	TA
TQ9WKX		81.86	-0.39	-0.36	81.76	-0.53	-0.48	XX
TRYVXW		82.30	0.05	0.05	83.51	1.22	1.11	TA
U93P6V		84.02	1.77	1.63	83.41	1.12	1.02	TA
WDQBNU		83.50	1.25	1.15	83.17	0.87	0.80	NZ
X3PZ4Q		80.63	-1.62	-1.48	80.90	-1.39	-1.27	TA
XV6A9H		84.30	2.05	1.88	83.87	1.57	1.43	NZ
Y4QPEX		82.10	-0.15	-0.14	81.97	-0.32	-0.30	TA



Plastics Interlaboratory Testing Program

Report #130

Analysis 764

2nd Qtr 2024

DSC Glass Transition Temperature

Summary Statistics

Sample V01

Sample V02

Grand Means

82.250 Degrees Celsius

82.294 Degrees Celsius

Stnd Dev Btwn Labs

1.088 Degrees Celsius

1.097 Degrees Celsius

Statistics based on 26 of 30 reporting participants

Sample V01: PET & Sample V02: PET

Comments on Assigned Data Flags for Test #764

HZTC64 (X) - Data for both samples are low. Possible Systematic Error.

EYPHW9 (X) - Data for both samples are low. Possible Systematic Error.

8LTXFJ (X) - Data for both samples are high. Possible Systematic Error.

8FX9QY (X) - Data for both samples are low. Possible Systematic Error.

Key to Instrument Codes Reported by Participants

MT Mettler Toledo Instruments

NZ Netzsch Instruments

PE Perkins Elmer Instruments

SH Shimadzu

TA TA Instruments

XX Instrument manufacturer not specified by lab



Plastics Interlaboratory Testing Program

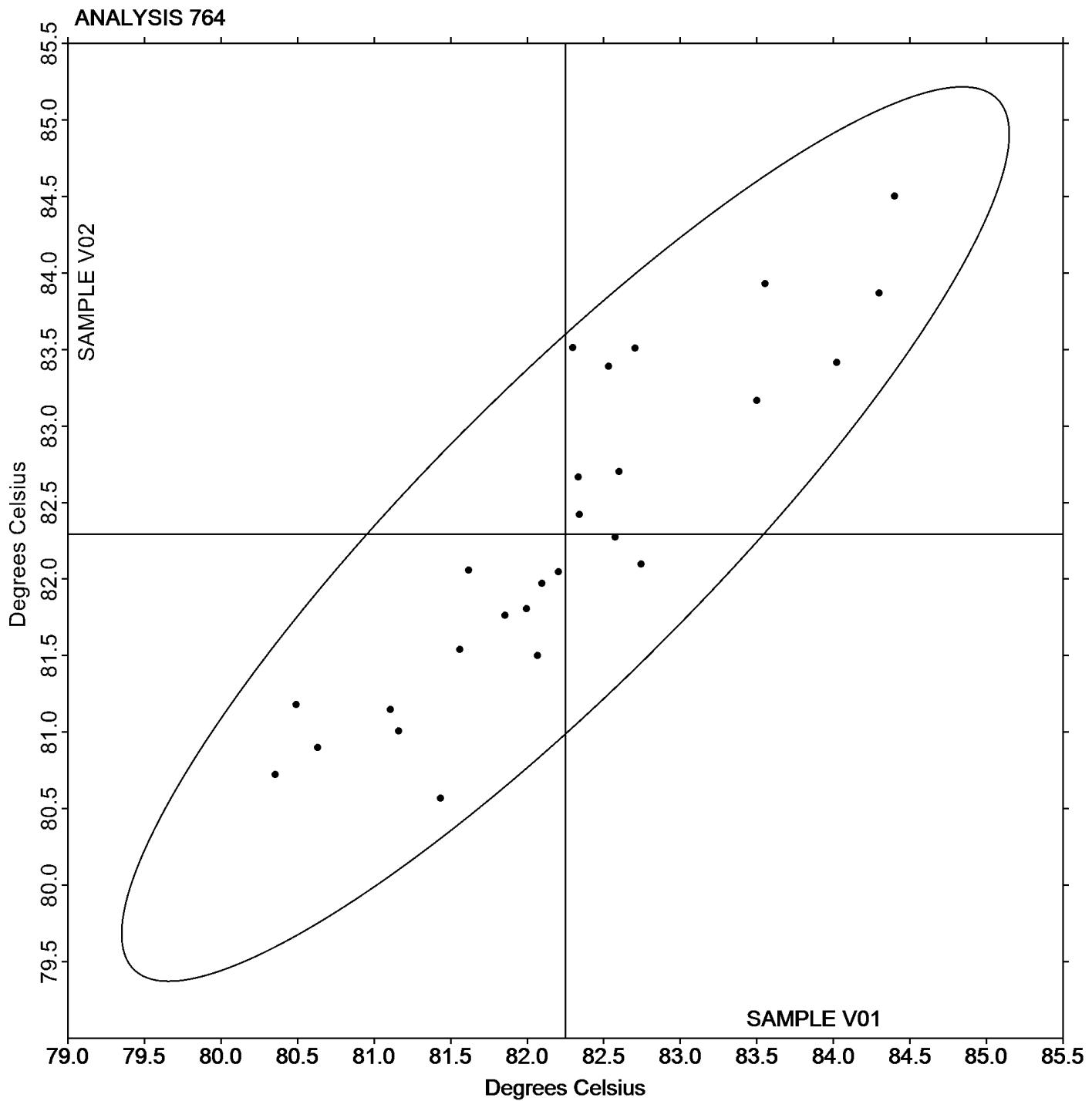
Report #130

Analysis 764

2nd Qtr 2024

DSC Glass Transition Temperature

Grand Mean Sample V01: 82.250 Degrees Celsius Grand Mean Sample V02: 82.294 Degrees Celsius





Plastics Interlaboratory Testing Program

Report #130

Analysis 765

2nd Qtr 2024

Research Crystallization Peak Temperature

WebCode	Data Flag	Sample W01			Sample W02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
9MBGRZ		173.68	-0.46	-0.19	169.19	-2.99	-0.61	TA
DNWN2E		175.33	1.19	0.49	175.22	3.04	0.62	TA
HZTC64		176.13	1.99	0.81	175.92	3.74	0.76	TA
JL44EG		173.47	-0.67	-0.28	161.27	-10.92	-2.23	NZ
KY8LPG		170.64	-3.50	-1.43	169.92	-2.27	-0.46	TA
PYTTYU		172.10	-2.04	-0.83	171.65	-0.53	-0.11	TA
U93P6V		177.12	2.98	1.22	177.23	5.05	1.03	TA
X3PZ4Q		170.53	-3.61	-1.47	169.77	-2.42	-0.49	XX
Y4QPEX		176.93	2.79	1.14	176.63	4.45	0.91	TA
YD3KZR		175.47	1.33	0.54	175.03	2.85	0.58	TA

Summary Statistics	Sample W01	Sample W02
Grand Means	174.140 Degrees Celsius	172.183 Degrees Celsius
Stnd Dev Btwn Labs	2.446 Degrees Celsius	4.899 Degrees Celsius

Statistics based on 10 of 10 reporting participants

Sample W01: PBT & Sample W02: PBT

Key to Instrument Codes Reported by Participants

NZ Netzsch Instruments

TA TA Instruments

XX Instrument manufacturer not specified by lab



Plastics Interlaboratory Testing Program

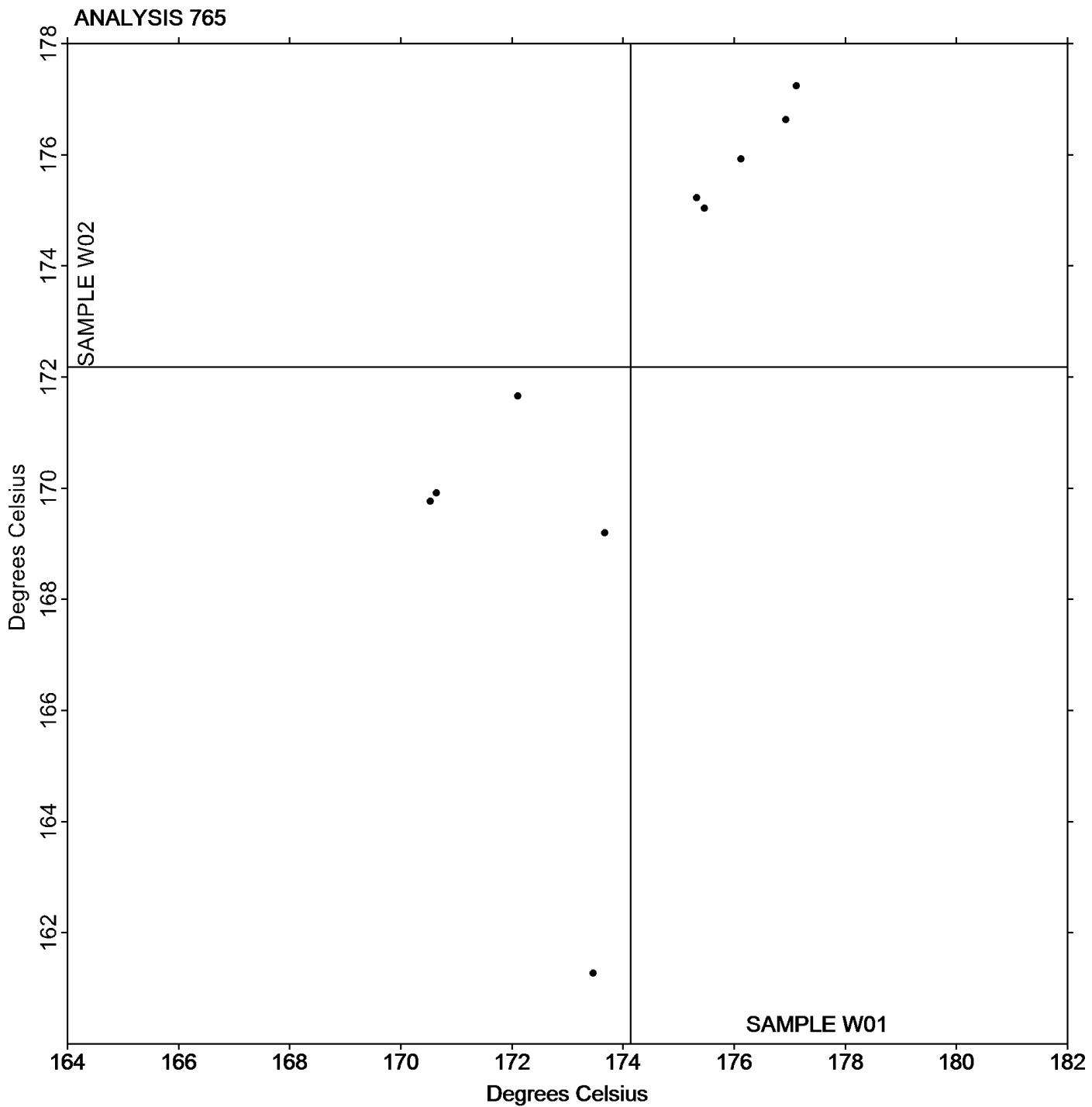
Report #130

Analysis 765

2nd Qtr 2024

Research Crystallization Peak Temperature

Grand Mean Sample W01: 174.14 Degrees Celsius Grand Mean Sample W02: 172.18 Degrees Celsius



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Plastics Interlaboratory Testing Program

Report #130

Analysis 766

2nd Qtr 2024

Research Melting Peak Temperature

WebCode	Data Flag	Sample W01			Sample W02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
9MBGRZ		227.69	4.51	2.44	227.70	4.47	2.53	TA
DNWN2E		223.80	0.61	0.33	223.62	0.40	0.23	XX
HZTC64		221.16	-2.02	-1.10	221.24	-1.98	-1.12	TA
JL44EG		222.23	-0.95	-0.52	222.20	-1.02	-0.58	NZ
KY8LPG		221.65	-1.53	-0.83	221.83	-1.40	-0.79	TA
NVFKGX		223.43	0.24	0.13	223.60	0.38	0.22	TA
PYTTYU		224.45	1.27	0.69	224.43	1.20	0.68	TA
U93P6V		223.61	0.43	0.23	223.49	0.27	0.15	TA
X3PZ4Q		221.83	-1.35	-0.73	222.37	-0.86	-0.48	TA
Y4QPEX		223.52	0.33	0.18	223.04	-0.19	-0.11	TA
YD3KZR		221.67	-1.52	-0.82	221.93	-1.29	-0.73	TA

Summary Statistics

Sample W01

Sample W02

Grand Means

223.187 Degrees Celsius

223.222 Degrees Celsius

Stnd Dev Btwn Labs

1.848 Degrees Celsius

1.766 Degrees Celsius

Statistics based on 11 of 11 reporting participants

Sample W01: PBT & Sample W02: PBT

Key to Instrument Codes Reported by Participants

NZ Netzsch Instruments

TA TA Instruments

XX Instrument manufacturer not specified by lab



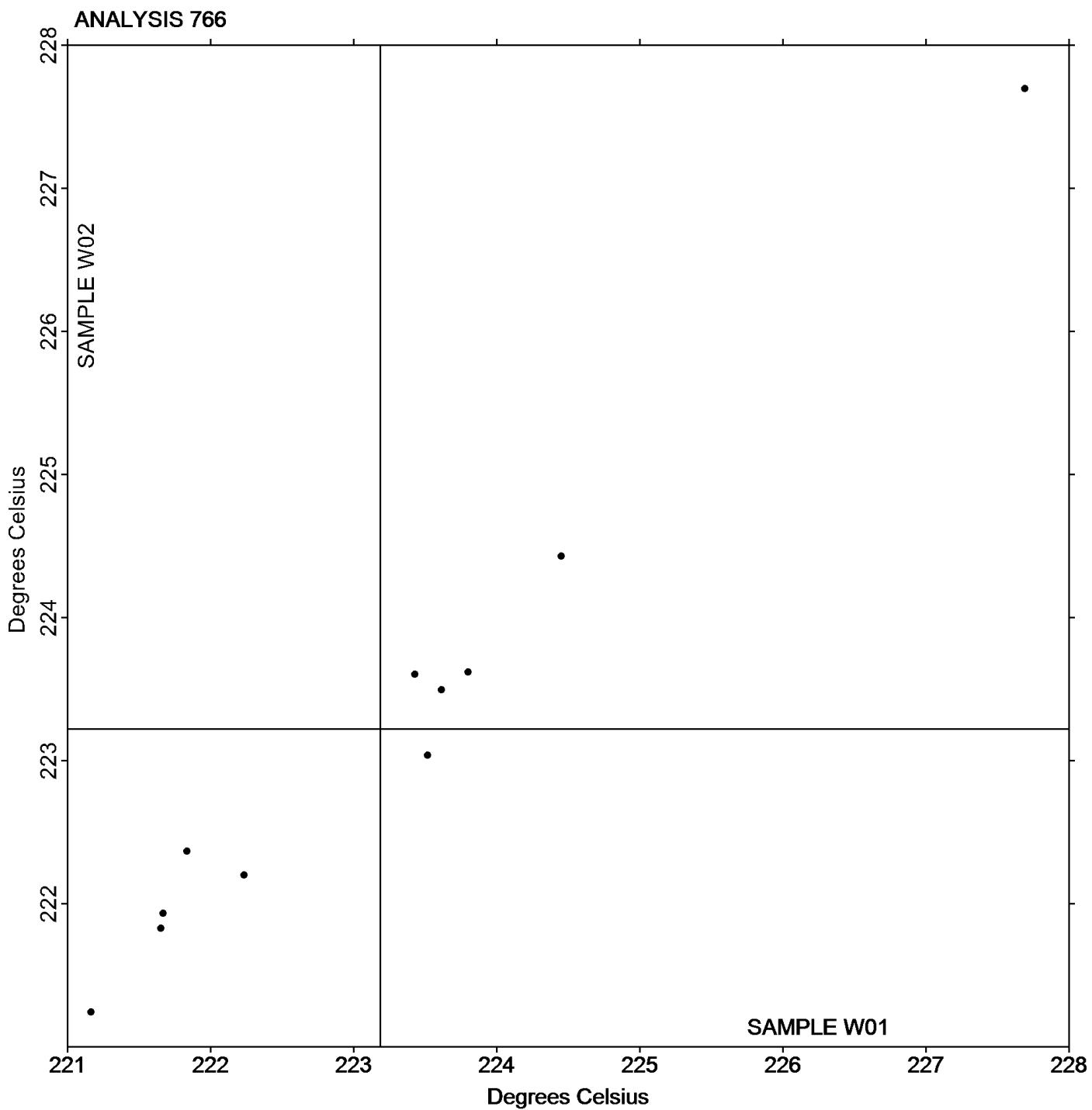
Plastics Interlaboratory Testing Program

Analysis 766 Research Melting Peak Temperature

Report #130

2nd Qtr 2024

Grand Mean Sample W01: 223.19 Degrees Celsius Grand Mean Sample W02: 223.22 Degrees Celsius



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Plastics Interlaboratory Testing Program

Analysis 767

Research Heat of Crystallization

Report #130

2nd Qtr 2024

WebCode	Data Flag	Sample W01			Sample W02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
9MBGRZ		40.60	-7.65	-1.11	39.95	-8.15	-1.04	TA
DNWN2E		38.94	-9.30	-1.35	38.47	-9.63	-1.23	XX
HZTC64		49.08	0.83	0.12	49.60	1.50	0.19	TA
JL44EG		44.81	-3.44	-0.50	43.45	-4.65	-0.59	NZ
KY8LPG		63.42	15.17	2.21	66.30	18.20	2.33	TA
PYTTYU		46.85	-1.39	-0.20	46.24	-1.86	-0.24	TA
U93P6V		52.75	4.51	0.66	51.60	3.50	0.45	TA
X3PZ4Q		46.43	-1.81	-0.26	45.21	-2.89	-0.37	TA
Y4QPEX		47.90	-0.34	-0.05	48.69	0.59	0.08	TA
YD3KZR		51.68	3.43	0.50	51.50	3.40	0.43	TA

Summary Statistics	Sample W01	Sample W02
Grand Means	48.247 Joules Per Gram	48.101 Joules Per Gram
Stnd Dev Btwn Labs	6.874 Joules Per Gram	7.818 Joules Per Gram

Statistics based on 10 of 10 reporting participants

Sample W01: PBT & Sample W02: PBT

Key to Instrument Codes Reported by Participants

NZ Netzsch Instruments

TA TA Instruments

XX Instrument manufacturer not specified by lab



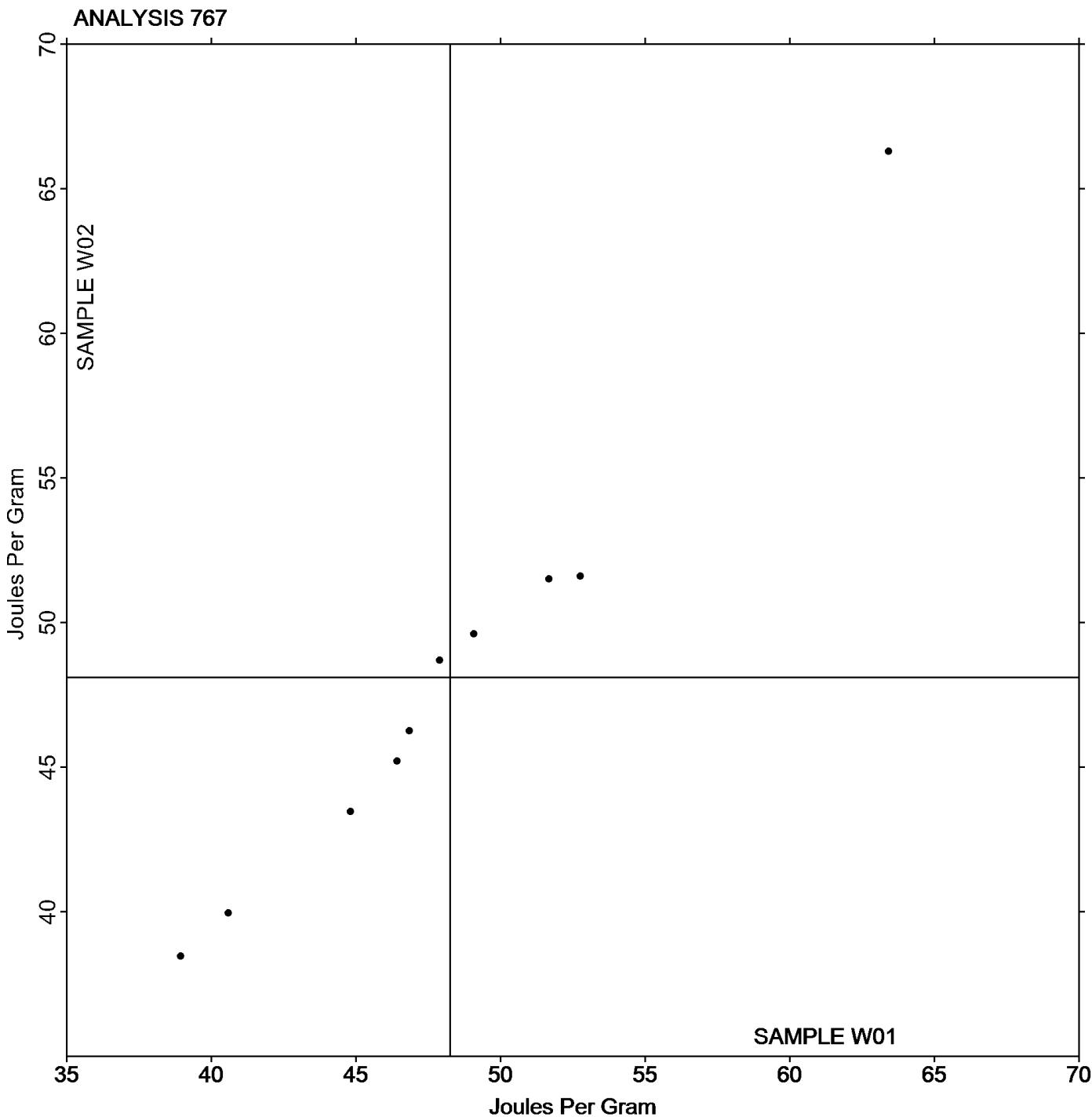
Plastics Interlaboratory Testing Program

Analysis 767 Research Heat of Crystallization

Report #130

2nd Qtr 2024

Grand Mean Sample W01: 48.247 Joules Per Gram Grand Mean Sample W02: 48.101 Joules Per Gram



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Plastics Interlaboratory Testing Program

Analysis 768

Report #130

2nd Qtr 2024

Research Heat of Fusion

WebCode	Data Flag	Sample W01			Sample W02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
9MBGRZ		37.67	-7.33	-1.02	38.23	-7.09	-0.97	TA
DNWN2E		38.03	-6.97	-0.97	40.21	-5.11	-0.70	XX
HZTC64		47.06	2.06	0.29	46.73	1.41	0.19	TA
JL44EG		45.18	0.18	0.02	44.80	-0.52	-0.07	NZ
KY8LPG		60.17	15.17	2.11	61.68	16.36	2.23	TA
PYTTYU		47.32	2.32	0.32	46.60	1.28	0.17	TA
U93P6V		45.25	0.25	0.03	45.38	0.06	0.01	TA
X3PZ4Q		40.14	-4.86	-0.68	39.16	-6.16	-0.84	TA
Y4QPEX		37.59	-7.41	-1.03	38.18	-7.14	-0.97	TA
YD3KZR		51.60	6.60	0.92	52.22	6.90	0.94	TA

Summary Statistics

Sample W01

Sample W02

Grand Means

45.000 Joules Per Gram

45.319 Joules Per Gram

Stnd Dev Btwn Labs

7.182 Joules Per Gram

7.337 Joules Per Gram

Statistics based on 10 of 10 reporting participants

Sample W01: PBT & Sample W02: PBT

Key to Instrument Codes Reported by Participants

NZ Netzsch Instruments

TA TA Instruments

XX Instrument manufacturer not specified by lab



Plastics Interlaboratory Testing Program

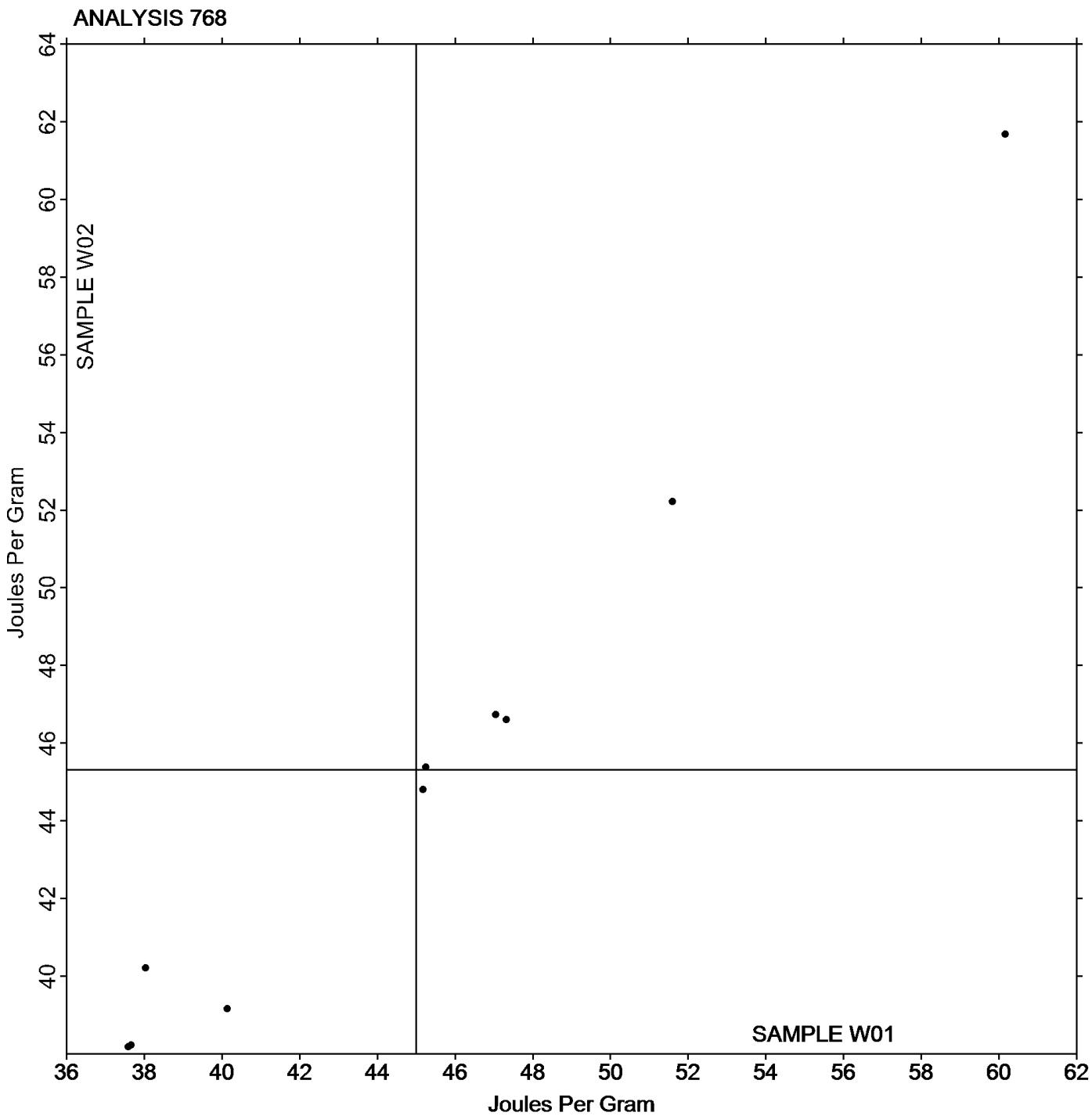
Report #130

Analysis 768

2nd Qtr 2024

Research Heat of Fusion

Grand Mean Sample W01: 45.000 Joules Per Gram Grand Mean Sample W02: 45.319 Joules Per Gram



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Plastics Interlaboratory Testing Program

Analysis 769

Report #130

2nd Qtr 2024

Research Glass Transition Temperature

WebCode	Data Flag	Sample V01			Sample V02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
9MBGRZ		80.35	-0.58	-0.19	80.72	-0.38	-0.12	TA
BF9ZH8		83.13	2.20	0.71	83.17	2.06	0.66	XX
DNWN2E		82.53	1.60	0.52	83.39	2.28	0.74	XX
HZTC64		72.92	-8.01	-2.59	72.97	-8.13	-2.62	TA
JL44EG		81.87	0.93	0.30	80.97	-0.14	-0.05	NZ
KY8LPG		81.62	0.68	0.22	82.06	0.95	0.31	TA
PYTTYU		82.71	1.77	0.57	83.51	2.40	0.77	TA
QCT32U		82.33	1.40	0.45	82.67	1.56	0.50	TA
U93P6V		84.30	3.36	1.09	84.08	2.98	0.96	TA
X3PZ4Q		80.77	-0.17	-0.06	80.43	-0.67	-0.22	TA
Y4QPEX		81.65	0.72	0.23	81.62	0.51	0.16	TA
YD3KZR		77.07	-3.87	-1.25	77.70	-3.41	-1.10	TA

Summary Statistics

Sample V01

Sample V02

Grand Means

80.938 Degrees Celsius

81.107 Degrees Celsius

Stnd Dev Btwn Labs

3.092 Degrees Celsius

3.105 Degrees Celsius

Statistics based on 12 of 12 reporting participants

Sample V01: PET & Sample V02: PET

Key to Instrument Codes Reported by Participants

NZ Netzsch Instruments

TA TA Instruments

XX Instrument manufacturer not specified by lab



Plastics Interlaboratory Testing Program

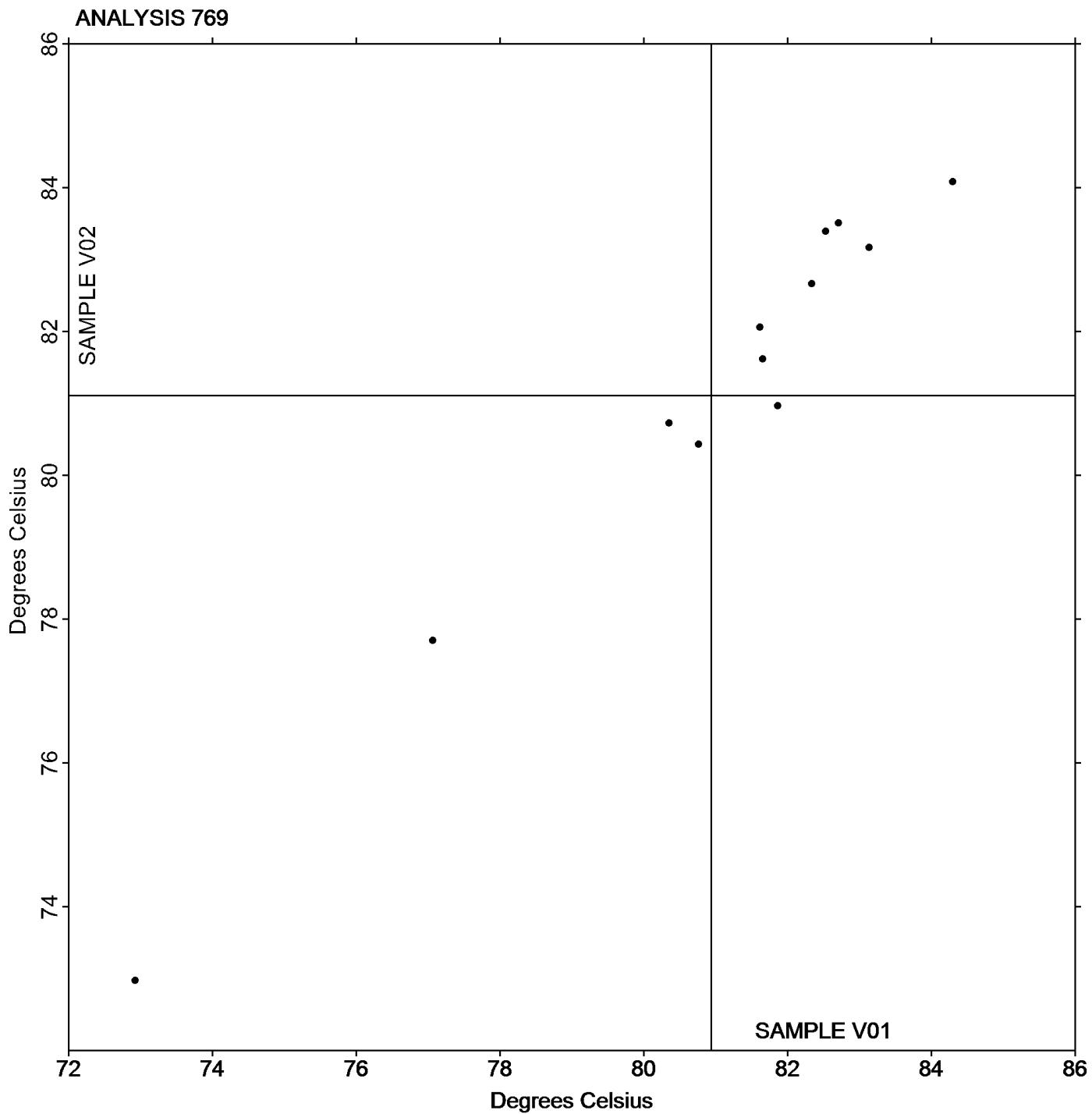
Analysis 769

Research Glass Transition Temperature

Report #130

2nd Qtr 2024

Grand Mean Sample V01: 80.938 Degrees Celsius Grand Mean Sample V02: 81.107 Degrees Celsius



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Plastics Interlaboratory Testing Program

Analysis 770

Report #130

2nd Qtr 2024

Tensile Stress at Yield, Film Samples - psi

WebCode	Data Flag	Sample B01			Sample B02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2ELMDG		1,774	100	0.71	1,762	109	0.65	IN
8LTXFJ		1,651	-23	-0.17	1,791	139	0.83	WZ
8WN4AG		1,686	12	0.09	1,635	-18	-0.10	IN
AF9UD7		1,535	-139	-0.99	1,310	-342	-2.04	IN
B2PNGW		1,724	50	0.36	1,742	90	0.54	TH
BMRC9T		1,806	132	0.95	1,810	158	0.94	IN
E9JL8W		1,494	-180	-1.29	1,382	-271	-1.61	IN
HRZ9UF		1,658	-16	-0.11	1,613	-40	-0.24	IN
NHBBQ3		1,595	-79	-0.56	1,596	-56	-0.33	IN
T6NURJ		1,568	-106	-0.76	1,601	-51	-0.30	WZ
V24VCF		1,930	256	1.84	1,789	137	0.81	IN
WGREH2		1,736	62	0.45	1,711	59	0.35	MT
WN8XZF		1,491	-183	-1.31	1,462	-191	-1.14	TO
XQB4YL		1,896	222	1.59	1,931	278	1.66	MT
Y69JF8		1,676	2	0.01	1,711	58	0.35	IM
YD3KZR		1,782	108	0.77	1,776	123	0.74	IN
ZPQBR9		1,454	-220	-1.57	1,469	-183	-1.09	SH

Summary Statistics

Sample B01

Sample B02

Grand Means

1,673.8 psi

1,652.5 psi

Stnd Dev Btwn Labs

139.8 psi

167.8 psi

Statistics based on 17 of 17 reporting participants

Sample B01: LDPE & Sample B02: LDPE

Key to Instrument Codes Reported by Participants

IM Instru-Met Instruments

IN Instron

MT MTS/Sintech

SH Shimadzu

TH Thwing Albert

TO Tinius Olsen

WZ Zwick



Plastics Interlaboratory Testing Program

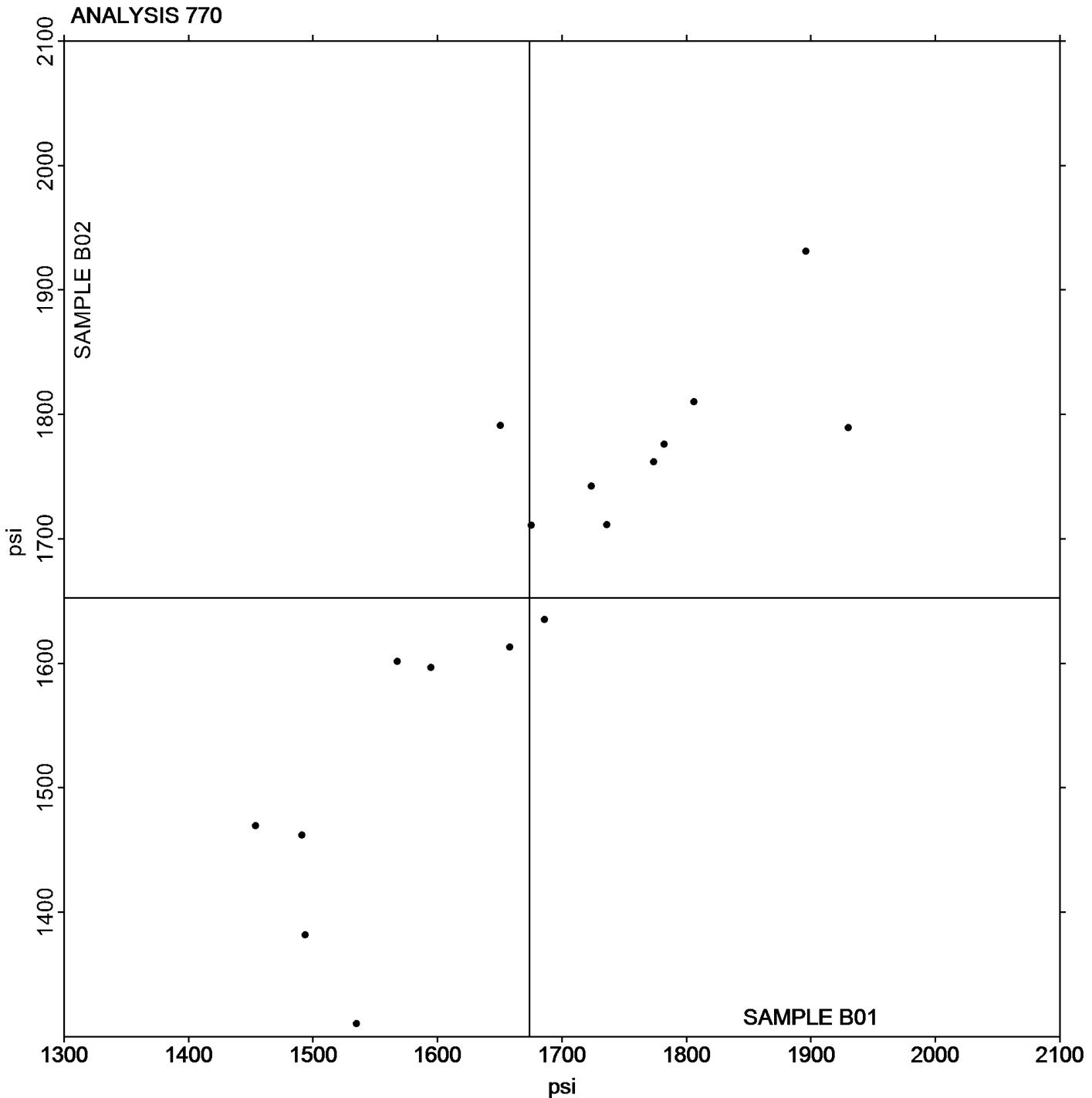
Analysis 770

Tensile Stress at Yield, Film Samples - psi

Report #130

2nd Qtr 2024

Grand Mean Sample B01: 1,673.81 psi Grand Mean Sample B02: 1,652.51 psi



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Plastics Interlaboratory Testing Program

Analysis 771

Report #130

2nd Qtr 2024

Tensile Stress at Break, Film Samples - psi

WebCode	Data Flag	Sample B01			Sample B02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2ELMDG		3,917	480	1.04	3,916	482	1.11	IN
8LTXFJ		3,525	88	0.19	3,839	404	0.93	WZ
8WN4AG		3,543	106	0.23	3,513	78	0.18	IN
AF9UD7		3,607	170	0.37	3,072	-363	-0.83	IN
B2PNGW		3,725	288	0.62	3,782	347	0.80	TH
BMRC9T		3,752	315	0.68	3,517	82	0.19	IN
E9JL8W		2,827	-610	-1.32	3,070	-365	-0.84	IN
HRZ9UF		3,329	-108	-0.23	3,312	-123	-0.28	IN
NHBBQ3		3,742	305	0.66	3,728	293	0.67	IN
T6NURJ		3,436	-1	0.00	3,411	-24	-0.05	WZ
V24VCF	X	3,556	119	0.26	1,608	-1,827	-4.20	IN
WGREH2		3,969	532	1.15	3,959	524	1.20	MT
WN8XZF		2,941	-496	-1.07	2,894	-541	-1.24	TO
X3PZ4Q		2,488	-949	-2.05	2,744	-691	-1.59	UC
XQB4YL		3,542	105	0.23	3,220	-215	-0.49	MT
Y69JF8		3,698	261	0.56	3,883	448	1.03	IM
YD3KZR		3,853	416	0.90	3,894	459	1.05	IN
ZPQBR9		2,536	-901	-1.95	2,639	-796	-1.83	SH

Summary Statistics

Sample B01

Sample B02

Grand Means

3,437.1 psi

3,434.9 psi

Stnd Dev Btwn Labs

463.2 psi

435.2 psi

Statistics based on 17 of 18 reporting participants

Sample B01: LDPE & Sample B02: LDPE

Comments on Assigned Data Flags for Test #771

V24VCF (X) - Data for sample B02 are low.

Key to Instrument Codes Reported by Participants

IM Instru-Met Instruments

IN Instron

MT MTS/Sintech

SH Shimadzu

TH Thwing Albert

TO Tinius Olsen

UC United

WZ Zwick



Plastics Interlaboratory Testing Program

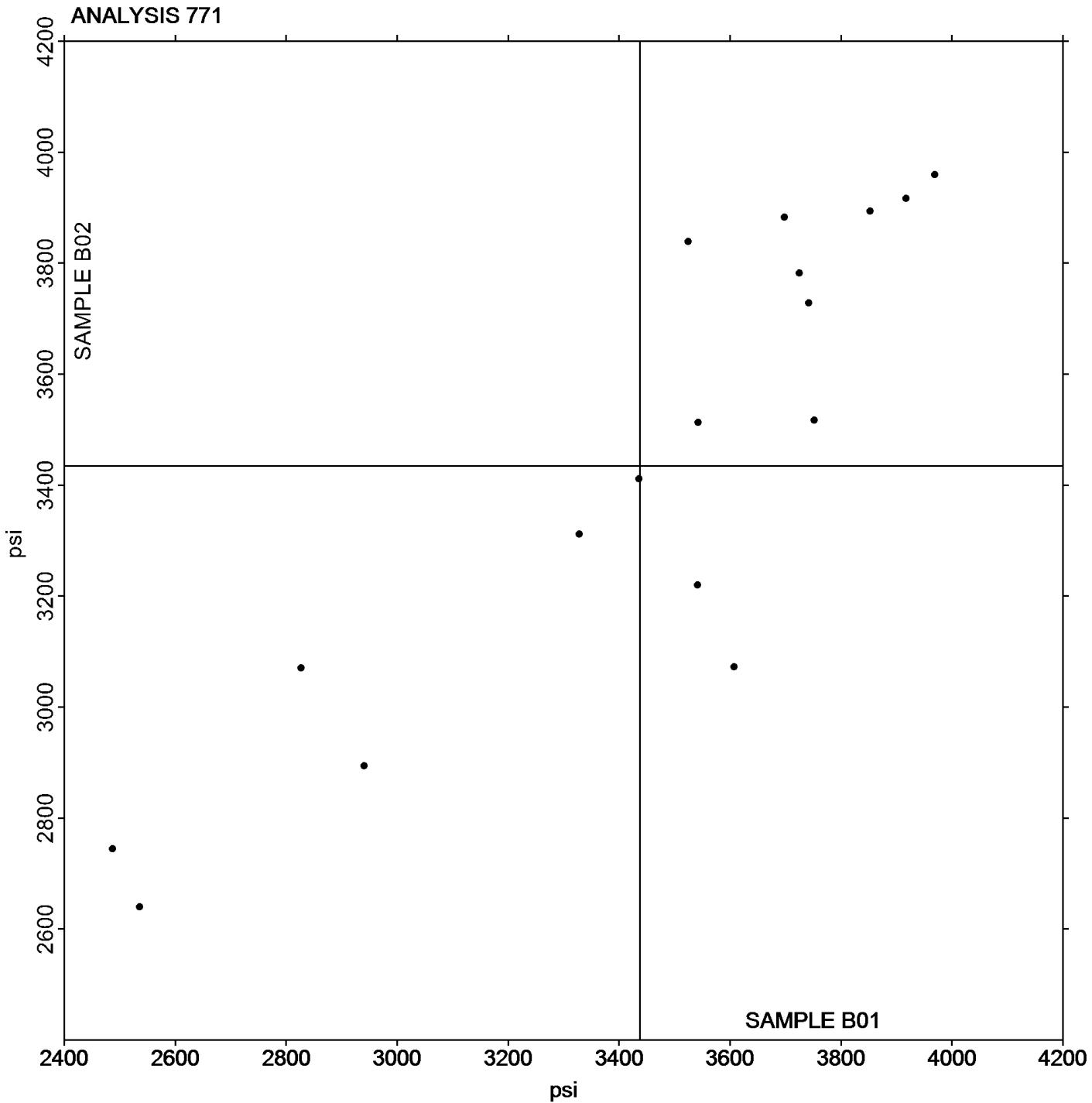
Analysis 771

Report #130

2nd Qtr 2024

Tensile Stress at Break, Film Samples - psi

Grand Mean Sample B01: 3,437.07 psi Grand Mean Sample B02: 3,434.94 psi



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Plastics Interlaboratory Testing Program

Analysis 772

Report #130

2nd Qtr 2024

Percent Elongation at Yield, Films

WebCode	Data Flag	Sample B01			Sample B02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2ELMDG		42.85	7.68	0.53	42.37	7.34	0.48	IN
8LTXFJ		41.10	5.93	0.41	38.90	3.87	0.25	WZ
8WN4AG		47.47	12.30	0.85	45.96	10.93	0.72	IN
AF9UD7		45.43	10.26	0.71	44.73	9.70	0.64	IN
BMRC9T		61.26	26.09	1.81	63.29	28.26	1.86	IN
E9JL8W		14.22	-20.95	-1.45	14.21	-20.82	-1.37	IN
HRZ9UF		46.80	11.63	0.81	52.85	17.82	1.17	IN
NHBBQ3		7.99	-27.19	-1.88	8.02	-27.01	-1.77	IN
T6NURJ		28.41	-6.76	-0.47	28.45	-6.58	-0.43	WZ
V24VCF		27.88	-7.29	-0.50	29.69	-5.34	-0.35	IN
WGREH2		43.12	7.95	0.55	43.53	8.50	0.56	MT
WN8XZF		27.46	-7.71	-0.53	24.66	-10.37	-0.68	TO
XQB4YL		45.51	10.34	0.72	48.19	13.16	0.86	MT
Y69JF8		13.87	-21.30	-1.47	13.86	-21.17	-1.39	IM
YD3KZR		33.44	-1.73	-0.12	29.06	-5.97	-0.39	IN
ZPQBR9		35.93	0.75	0.05	32.68	-2.35	-0.15	SH

Summary Statistics

Sample B01

Sample B02

Grand Means

35.171 Percent

35.027 Percent

Stnd Dev Btwn Labs

14.446 Percent

15.222 Percent

Statistics based on 16 of 16 reporting participants

Sample B01: LDPE & Sample B02: LDPE

Key to Instrument Codes Reported by Participants

IM Instru-Met Instruments

IN Instron

MT MTS/Sintech

SH Shimadzu

TO Tinius Olsen

WZ Zwick



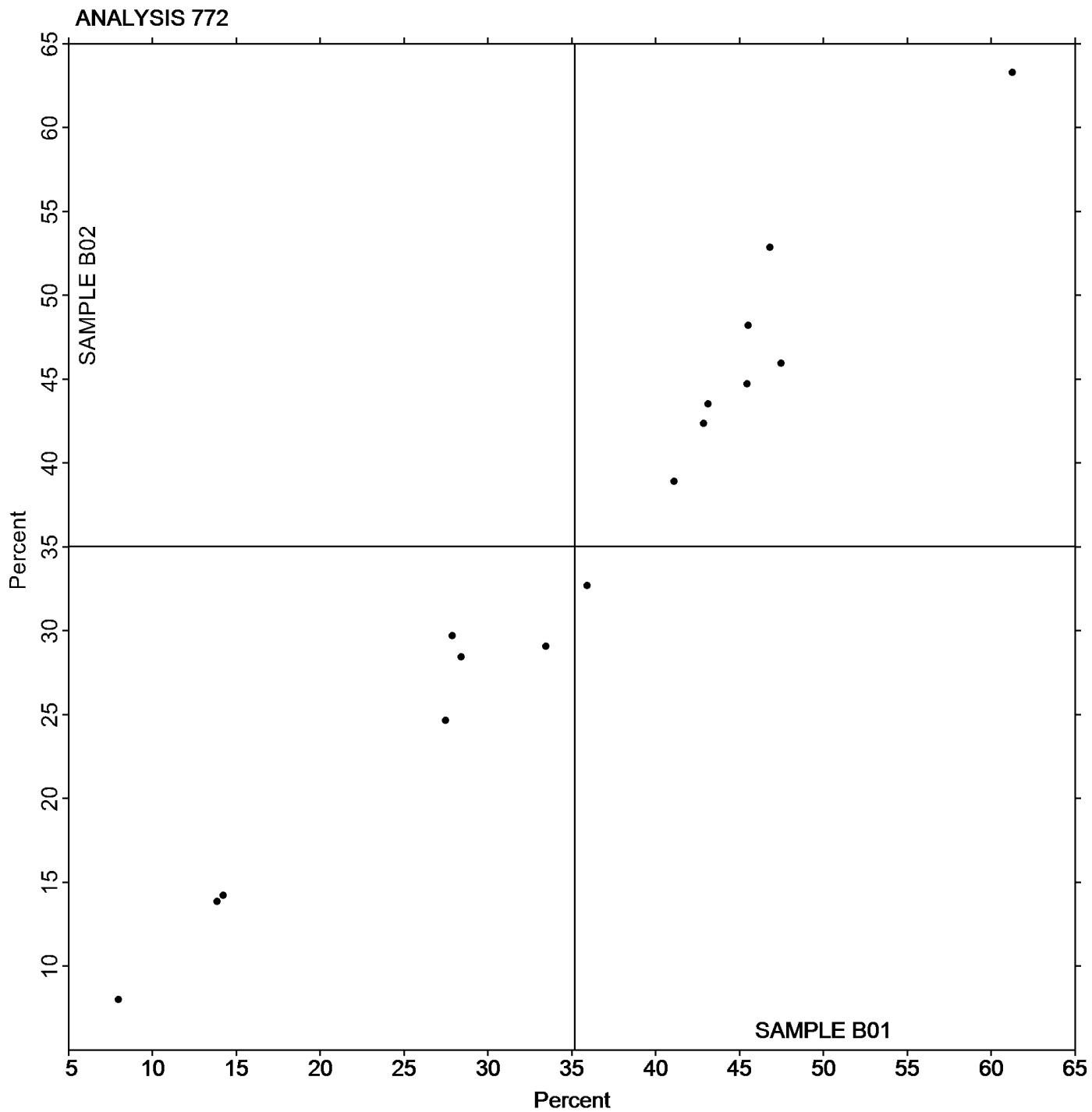
Plastics Interlaboratory Testing Program

Analysis 772 Percent Elongation at Yield, Films

Report #130

2nd Qtr 2024

Grand Mean Sample B01: 35.171 Percent Grand Mean Sample B02: 35.027 Percent



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Plastics Interlaboratory Testing Program

Analysis 773

Report #130

2nd Qtr 2024

Percent Elongation at Break, Film Samples

WebCode	Data Flag	Sample B01			Sample B02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2ELMDG		692.2	-121.5	-0.74	708.7	-97.0	-0.51	IN
8LTXFJ		694.0	-119.7	-0.73	693.0	-112.7	-0.59	WZ
8WN4AG		885.5	71.8	0.44	922.0	116.3	0.61	IN
AF9UD7		845.5	31.9	0.19	828.5	22.8	0.12	IN
B2PNGW		773.4	-40.3	-0.24	770.3	-35.4	-0.19	TH
BMRC9T		1,018.8	205.1	1.25	1,022.6	216.8	1.13	IN
E9JL8W		794.5	-19.2	-0.12	882.2	76.5	0.40	IN
HRZ9UF		925.1	111.4	0.68	930.9	125.2	0.65	IN
NHBBQ3		678.0	-135.7	-0.82	666.9	-138.8	-0.73	IN
T6NURJ		1,220.0	406.3	2.47	1,200.0	394.3	2.06	WZ
V24VCF	*	480.2	-333.5	-2.03	287.5	-518.2	-2.71	IN
WGREH2		829.6	15.9	0.10	832.7	27.0	0.14	MT
WN8XZF		959.4	145.7	0.89	892.9	87.2	0.46	TO
XQB4YL		750.5	-63.2	-0.38	700.1	-105.6	-0.55	MT
Y69JF8		852.3	38.6	0.23	872.3	66.6	0.35	IM
YD3KZR		697.9	-115.8	-0.70	700.3	-105.4	-0.55	IN
ZPQBR9		735.3	-78.4	-0.48	786.6	-19.1	-0.10	SH

Summary Statistics

Sample B01

Sample B02

Grand Means

813.66 Percent

805.74 Percent

Stnd Dev Btwn Labs

164.50 Percent

191.15 Percent

Statistics based on 17 of 17 reporting participants

Sample B01: LDPE & Sample B02: LDPE

Key to Instrument Codes Reported by Participants

IM Instru-Met Instruments

IN Instron

MT MTS/Sintech

SH Shimadzu

TH Thwing Albert

TO Tinius Olsen

WZ Zwick



Plastics Interlaboratory Testing Program

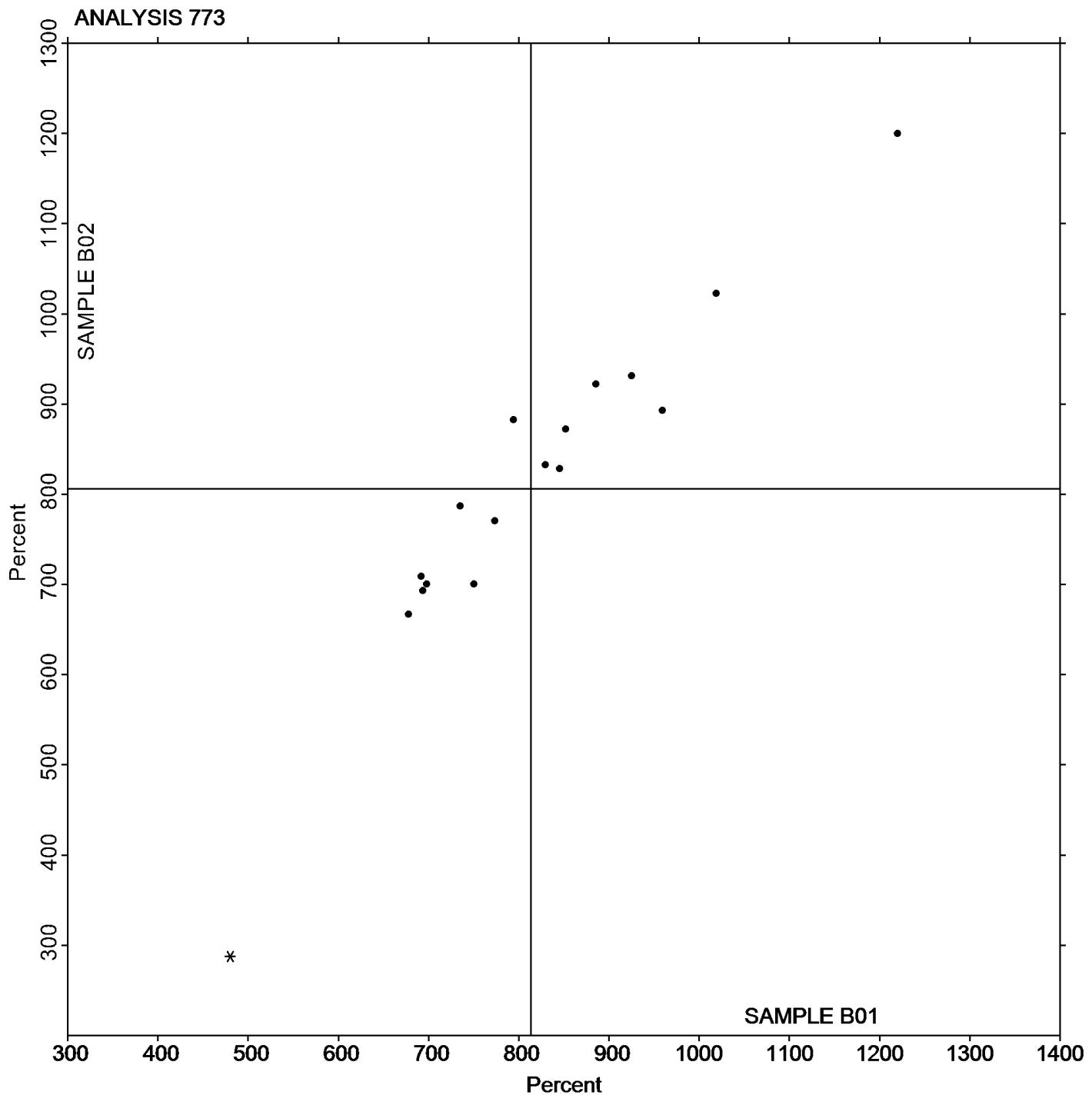
Analysis 773

Report #130

2nd Qtr 2024

Percent Elongation at Break, Film Samples

Grand Mean Sample B01: 813.66 Percent Grand Mean Sample B02: 805.74 Percent



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Plastics Interlaboratory Testing Program

Analysis 774

Report #130

2nd Qtr 2024

Thickness of Film Tensile Samples - mils

WebCode	Data Flag	Sample B01			Sample B02		
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV
2ELMDG		2.8662	-0.1058	-0.50	2.9095	-0.0089	-0.04
8LTXFJ		3.1732	0.2012	0.94	2.9803	0.0619	0.29
8WN4AG		2.9400	-0.0320	-0.15	3.1800	0.2616	1.22
AF9UD7		3.1900	0.2180	1.02	2.6600	-0.2584	-1.21
B2PNGW		2.9440	-0.0280	-0.13	2.6600	-0.2584	-1.21
BMRC9T		2.8800	-0.0920	-0.43	2.8250	-0.0934	-0.44
E9JL8W		3.2950	0.3230	1.51	3.4820	0.5636	2.63
HRZ9UF		2.9870	0.0150	0.07	2.9010	-0.0174	-0.08
M2R47R		2.6260	-0.3460	-1.62	2.7440	-0.1744	-0.81
MJ8D8T		2.7360	-0.2360	-1.11	2.6830	-0.2354	-1.10
NHBBQ3		3.0210	0.0490	0.23	2.8680	-0.0504	-0.24
T6NURJ		3.2670	0.2950	1.38	2.9225	0.0041	0.02
V24VCF		2.6300	-0.3420	-1.60	2.8100	-0.1084	-0.51
WGREH2		3.0730	0.1010	0.47	3.0150	0.0966	0.45
WN8XZF		3.1300	0.1580	0.74	3.1339	0.2155	1.01
X3PZ4Q		3.2500	0.2780	1.30	2.9800	0.0616	0.29
XQB4YL		2.7550	-0.2170	-1.02	2.5750	-0.3434	-1.60
Y69JF8		2.7900	-0.1820	-0.85	2.8740	-0.0444	-0.21
YD3KZR		3.1390	0.1670	0.78	3.1380	0.2196	1.02
ZPQBR9		2.7480	-0.2240	-1.05	3.0276	0.1091	0.51

Summary Statistics

Sample B01

Sample B02

Grand Means

2.97202 mils

2.91844 mils

Stnd Dev Btwn Labs

0.21356 mils

0.21427 mils

Statistics based on 20 of 20 reporting participants

Sample B01: LDPE & Sample B02: LDPE



Plastics Interlaboratory Testing Program

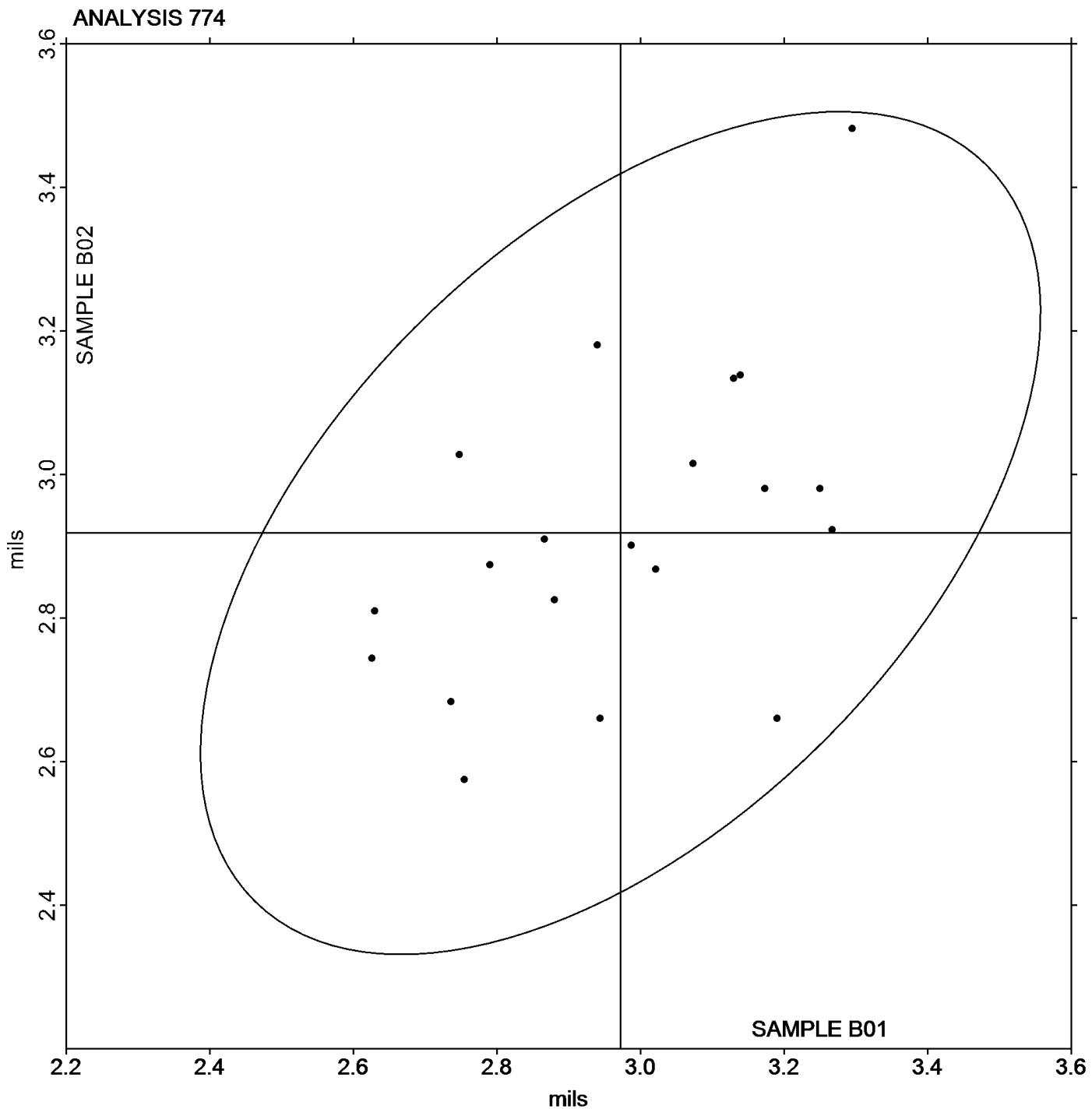
Analysis 774

Report #130

2nd Qtr 2024

Thickness of Film Tensile Samples - mils

Grand Mean Sample B01: 2.9720 mils Grand Mean Sample B02: 2.9184 mils





Plastics Interlaboratory Testing Program

Analysis 775

Report #130

2nd Qtr 2024

Secant Modulus at 1% Strain - psi

WebCode	Data Flag	Sample B01			Sample B02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
8WN4AG		33,366	2,475	0.52	33,298	1,548	0.35	IN
B2PNGW		34,075	3,184	0.66	34,819	3,069	0.68	TH
BMRC9T		30,387	-504	-0.10	33,409	1,659	0.37	IN
E9JL8W		23,703	-7,188	-1.50	27,605	-4,145	-0.92	IN
HRZ9UF		32,062	1,171	0.24	33,407	1,657	0.37	IN
NHBBQ3		31,553	662	0.14	32,468	718	0.16	IN
T6NURJ		32,677	1,786	0.37	30,690	-1,060	-0.24	WZ
V24VCF	X	11,465	-19,426	-4.04	12,176	-19,574	-4.37	IN
WN8XZF		28,280	-2,611	-0.54	28,810	-2,940	-0.66	TO
Y69JF8		32,591	1,700	0.35	33,385	1,636	0.36	IM
YD3KZR		39,147	8,255	1.72	39,370	7,620	1.70	IN
ZPQBR9		21,961	-8,930	-1.86	21,986	-9,763	-2.18	SH

Summary Statistics

Sample B01

Sample B02

Grand Means

30,891.0 psi

31,749.8 psi

Stnd Dev Btwn Labs

4,804.2 psi

4,481.6 psi

Statistics based on 11 of 12 reporting participants

Sample B01: LDPE & Sample B02: LDPE

Comments on Assigned Data Flags for Test #775

V24VCF (X) - Data for both samples are low. Inconsistent within the determinations of sample B02.

Key to Instrument Codes Reported by Participants

IM Instru-Met Instruments

IN Instron

SH Shimadzu

TH Thwing Albert

TO Tinius Olsen

WZ Zwick



Plastics Interlaboratory Testing Program

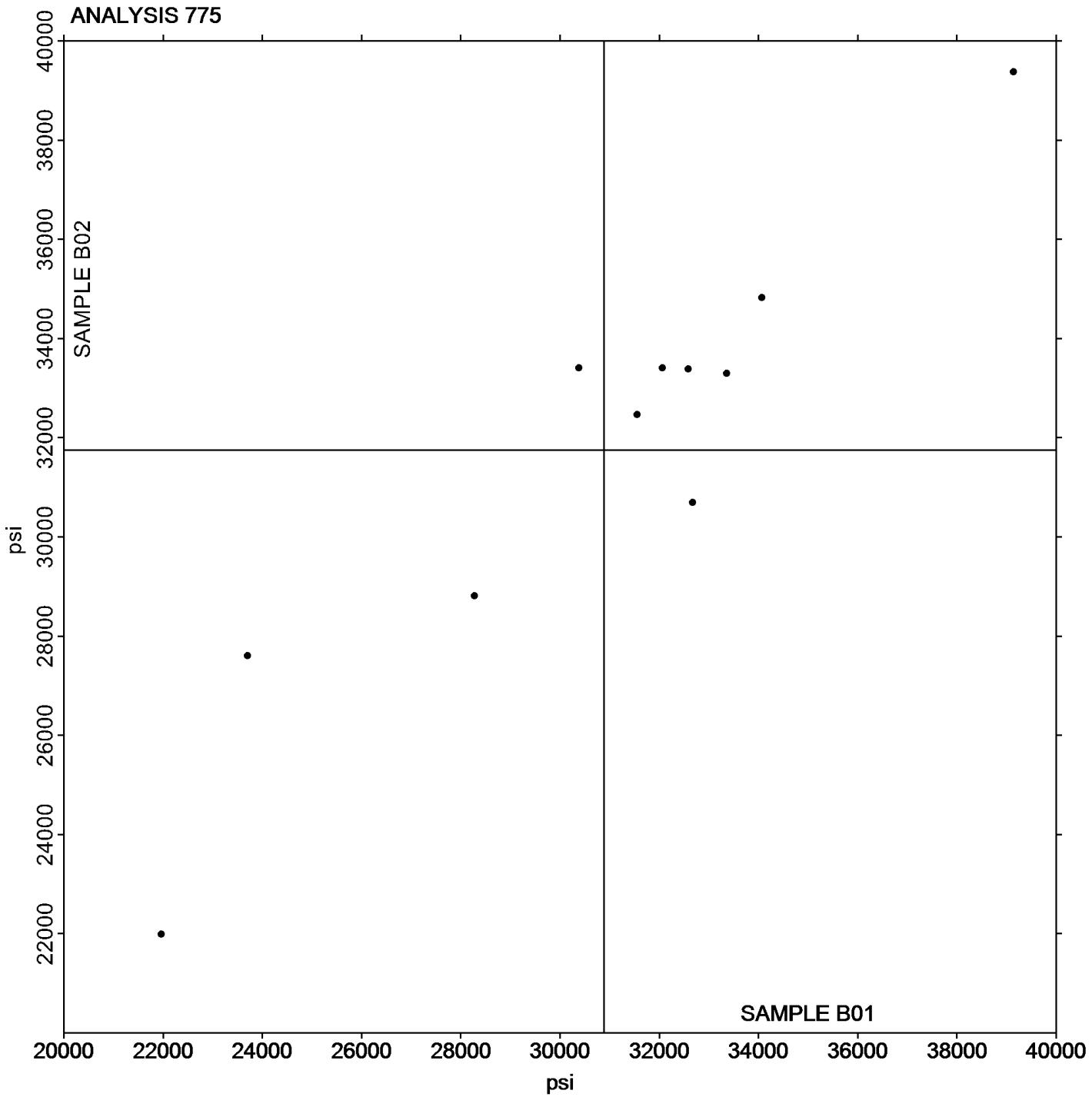
Analysis 775

Secant Modulus at 1% Strain - psi

Report #130

2nd Qtr 2024

Grand Mean Sample B01: 30,891.02 psi Grand Mean Sample B02: 31,749.75 psi



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Plastics Interlaboratory Testing Program

Analysis 776

Report #130

2nd Qtr 2024

Secant Modulus at 2% Strain - psi

WebCode	Data Flag	Sample B01			Sample B02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
8WN4AG		28,558	2,811	0.54	28,420	1,940	0.36	IN
BMRC9T		27,317	1,570	0.30	29,694	3,215	0.60	IN
E9JL8W		23,513	-2,234	-0.43	25,719	-761	-0.14	IN
HRZ9UF		26,795	1,049	0.20	27,842	1,363	0.25	IN
NHBBQ3		27,848	2,101	0.41	28,322	1,842	0.34	MT
V24VCF		12,331	-13,416	-2.59	12,174	-14,306	-2.68	XX
WGREGH2	X	65,504	39,757	7.67	67,043	40,563	7.59	MT
WN8XZF		28,400	2,653	0.51	28,950	2,470	0.46	TO
Y69JF8		27,259	1,513	0.29	28,087	1,607	0.30	IM
YD3KZR		31,175	5,429	1.05	31,000	4,520	0.85	IN
ZPQBR9		24,270	-1,476	-0.28	24,588	-1,891	-0.35	SH

Summary Statistics

Sample B01

Sample B02

Grand Means

25,746.7 psi

26,479.6 psi

Stnd Dev Btwn Labs

5,183.7 psi

5,346.7 psi

Statistics based on 10 of 11 reporting participants

Sample B01: LDPE & Sample B02: LDPE

Comments on Assigned Data Flags for Test #776

WGREGH2 (X) - Extreme data.

Key to Instrument Codes Reported by Participants

IM Instru-Met Instruments

IN Instron

MT MTS/Sintech

SH Shimadzu

TO Tinius Olsen

XX Instrument manufacturer not specified by lab



Plastics Interlaboratory Testing Program

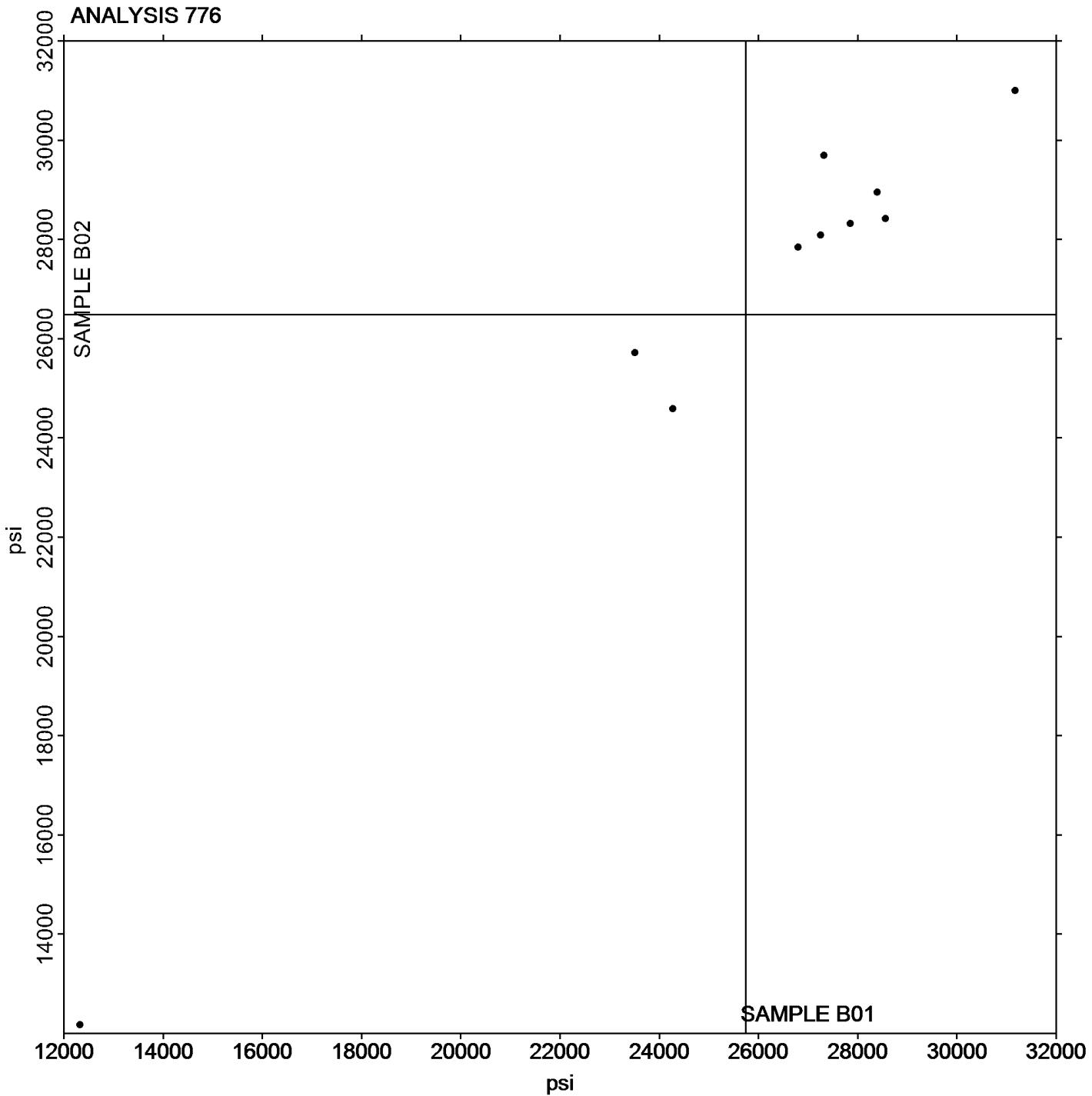
Analysis 776

Secant Modulus at 2% Strain - psi

Report #130

2nd Qtr 2024

Grand Mean Sample B01: 25,746.68 psi Grand Mean Sample B02: 26,479.58 psi



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Plastics Interlaboratory Testing Program

Analysis 780

Coefficient of Static Friction

Report #130

2nd Qtr 2024

WebCode	Data Flag	Sample P01			Sample P02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
823Q22		0.0598	-0.0858	-1.12	0.0738	-0.0726	-1.17	TH
8LTXFJ		0.1880	0.0424	0.55	0.1880	0.0416	0.67	SA
8WN4AG	*	0.1428	-0.0028	-0.04	0.2208	0.0744	1.20	TM
9CVUGE		0.0842	-0.0613	-0.80	0.0989	-0.0475	-0.77	IG
B2PNGW		0.1586	0.0130	0.17	0.1358	-0.0106	-0.17	XX
NHBBQ3		0.1350	-0.0106	-0.14	0.1568	0.0104	0.17	MI
T6NURJ		0.0554	-0.0902	-1.18	0.0698	-0.0766	-1.24	TH
WFGCW3		0.3534	0.2078	2.71	0.2916	0.1452	2.34	MI
WGREH2		0.1580	0.0124	0.16	0.1500	0.0036	0.06	TH
WN8XZF		0.1314	-0.0142	-0.19	0.1292	-0.0172	-0.28	RD
XQB4YL		0.1080	-0.0376	-0.49	0.1004	-0.0460	-0.74	TO
Y69JF8		0.2024	0.0568	0.74	0.1730	0.0266	0.43	TH
YD3KZR		0.1156	-0.0300	-0.39	0.1152	-0.0312	-0.50	TH

Summary Statistics

Sample P01

Sample P02

Grand Means

0.14559 COF

0.14641 COF

Stnd Dev Btwn Labs

0.07661 COF

0.06196 COF

Statistics based on 13 of 13 reporting participants

Sample P01: LDPE & Sample P02: LDPE

Key to Instrument Codes Reported by Participants

IG Instron
RD RDM CF
TH Thwing Albert Friction/Peel Tester Model 225-1
TO Tinius Olsen

MI MTS Insight
SA Shimadzu Autograph
TM TMI Slip and Friction Tester
XX Instrument make/model not specified by lab



Plastics Interlaboratory Testing Program

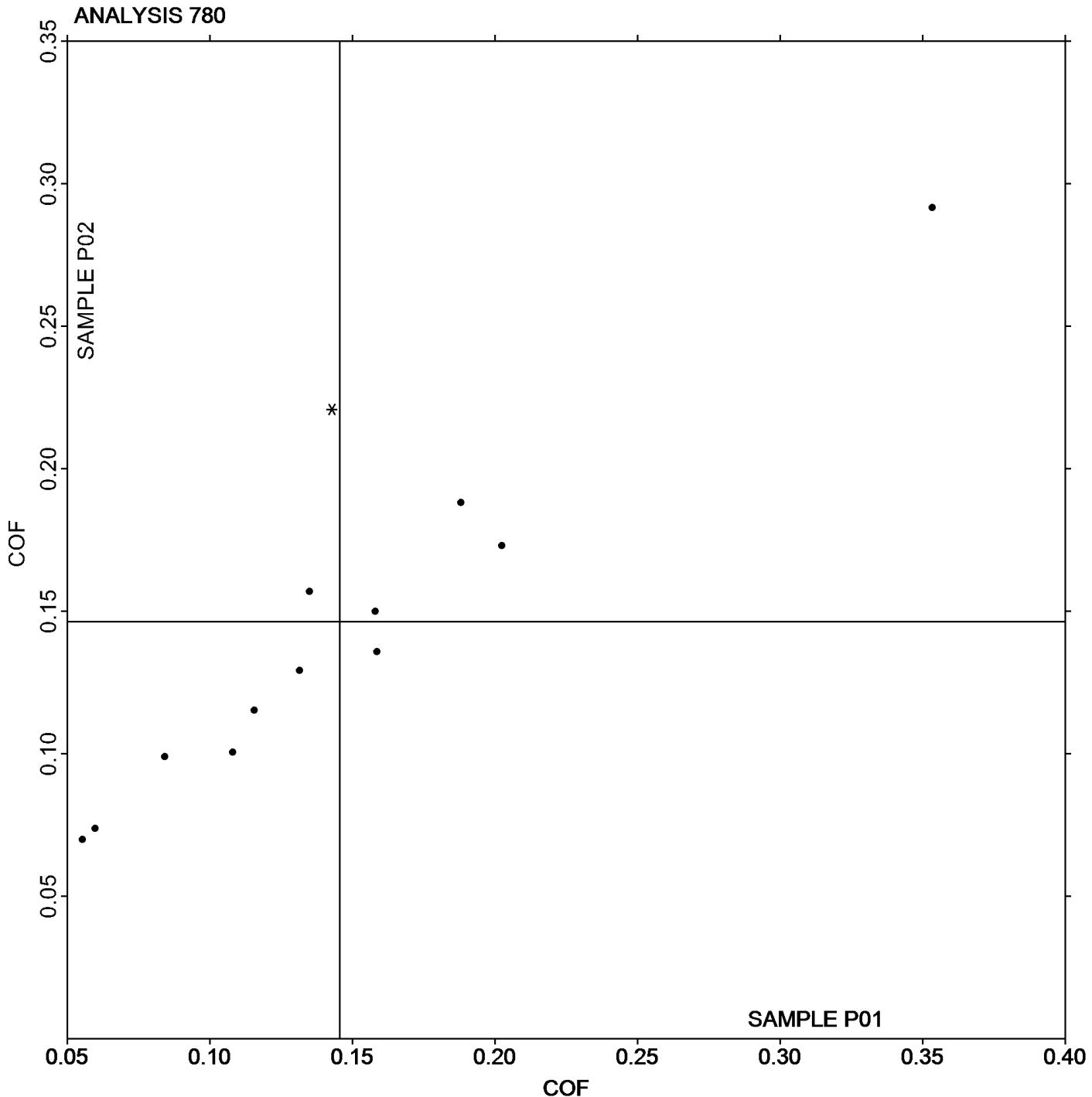
Analysis 780

Report #130

2nd Qtr 2024

Coefficient of Static Friction

Grand Mean Sample P01: 0.14559 COF Grand Mean Sample P02: 0.14641 COF



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Plastics Interlaboratory Testing Program

Analysis 781

Report #130

2nd Qtr 2024

Coefficient of Kinetic Friction

WebCode	Data Flag	Sample P01			Sample P02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
823Q22		0.0122	-0.0825	-1.45	0.0052	-0.0857	-1.72	TH
8LTXFJ		0.1180	0.0233	0.41	0.1100	0.0191	0.38	SA
8WN4AG		0.0828	-0.0119	-0.21	0.1110	0.0201	0.40	TM
9CVUGE		0.0397	-0.0550	-0.97	0.0303	-0.0606	-1.21	IG
B2PNGW		0.1078	0.0131	0.23	0.1068	0.0159	0.32	XX
NHBBQ3		0.0712	-0.0235	-0.41	0.0752	-0.0157	-0.31	MI
T6NURJ		0.0124	-0.0823	-1.45	0.0144	-0.0765	-1.53	TH
WFGCW3		0.2330	0.1383	2.43	0.1898	0.0989	1.98	MI
WGREH2		0.1122	0.0175	0.31	0.1186	0.0277	0.56	TH
WN8XZF		0.1180	0.0233	0.41	0.1188	0.0279	0.56	RD
XQB4YL		0.1018	0.0071	0.12	0.0936	0.0027	0.05	TO
Y69JF8		0.1236	0.0289	0.51	0.1072	0.0163	0.33	TH
YD3KZR		0.0986	0.0039	0.07	0.1008	0.0099	0.20	TH

Summary Statistics

Sample P01

Sample P02

Grand Means

0.09472 COF

0.09090 COF

Stnd Dev Btwn Labs

0.05693 COF

0.04986 COF

Statistics based on 13 of 13 reporting participants

Sample P01: LDPE & Sample P02: LDPE

Key to Instrument Codes Reported by Participants

IG Instron
RD RDM CF
TH Thwing Albert Friction/Peel Tester Model 225-1
TO Tinius Olsen

MI MTS Insight
SA Shimadzu Autograph
TM TMI Slip and Friction Tester
XX Instrument make/model not specified by lab



Plastics Interlaboratory Testing Program

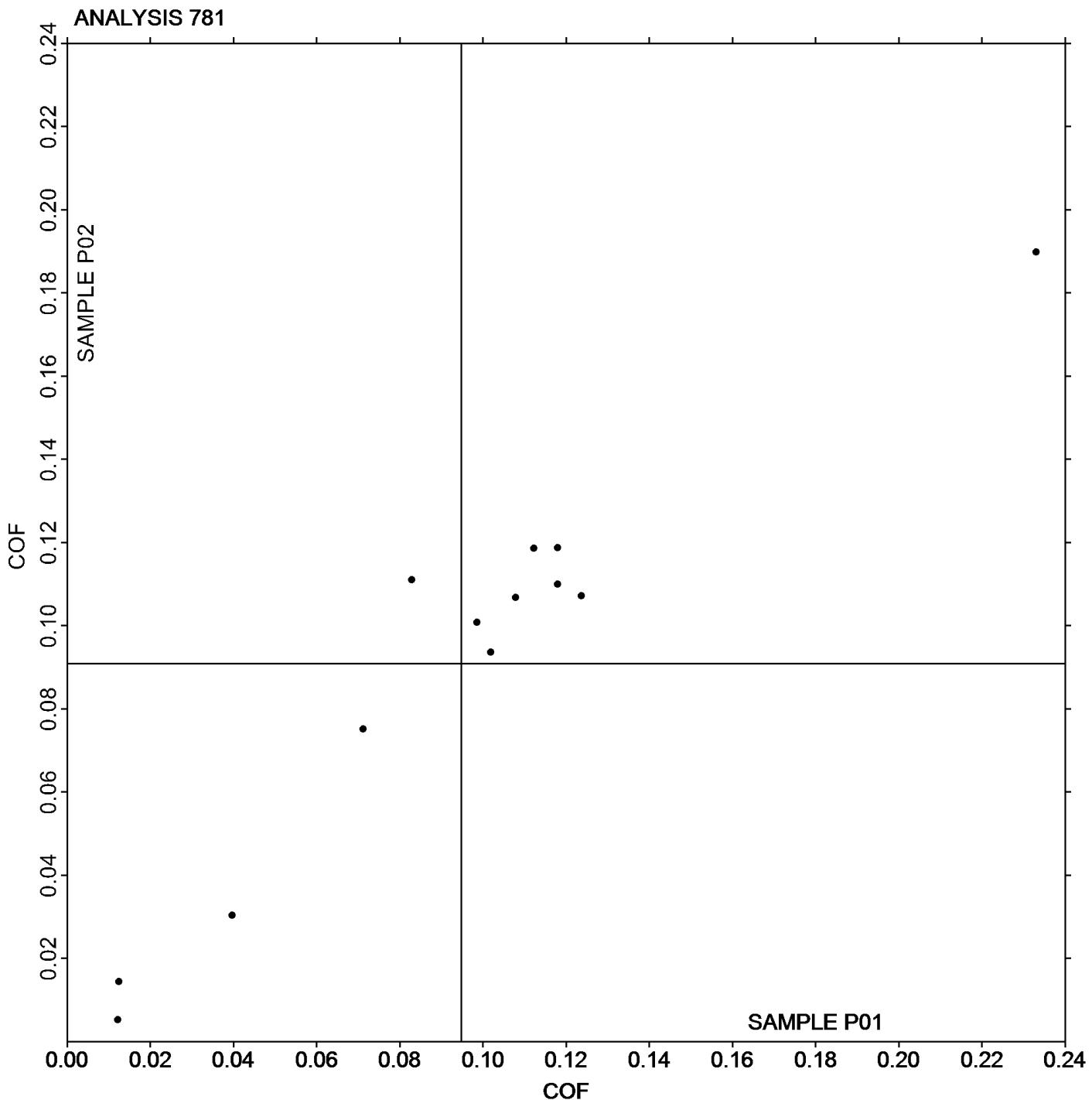
Analysis 781

Report #130

2nd Qtr 2024

Coefficient of Kinetic Friction

Grand Mean Sample P01: 0.09472 COF Grand Mean Sample P02: 0.09090 COF



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Plastics Interlaboratory Testing Program

Analysis 782

Tear Resistance of Films

Report #130

2nd Qtr 2024

WebCode	Data Flag	Sample Q01			Sample Q02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2ELMDG		339.2	51.7	0.83	417.1	119.7	1.82	SZ
8TPQND		284.3	-3.2	-0.05	263.3	-34.1	-0.52	TE
8WN4AG		185.5	-102.0	-1.63	255.4	-42.0	-0.64	TM
B2PNGW		335.2	47.7	0.76	344.8	47.4	0.72	TA
L79CUR		274.4	-13.1	-0.21	216.0	-81.4	-1.24	TA
NHBBQ3		231.6	-55.9	-0.89	253.4	-44.1	-0.67	TE
T6NURJ		257.0	-30.6	-0.49	248.0	-49.4	-0.75	TA
Y69JF8		269.5	-18.0	-0.29	272.0	-25.4	-0.39	EM
YD3KZR		287.3	-0.2	0.00	322.0	24.6	0.37	TE
ZPQBR9		411.2	123.7	1.98	382.4	85.0	1.29	EM

Summary Statistics

Sample Q01

Sample Q02

Grand Means

287.52 grams-force

297.44 grams-force

Stnd Dev Btwn Labs

62.55 grams-force

65.81 grams-force

Statistics based on 10 of 10 reporting participants

Sample Q01: LDPE & Sample Q02: LDPE

Key to Instrument Codes Reported by Participants

EM Elmendorf Tear Tester

SZ Textest FX 3700

TA Thwing-Albert

TE Thwing-Albert Pro Tear

TM TMI No. 83-1100



Plastics Interlaboratory Testing Program

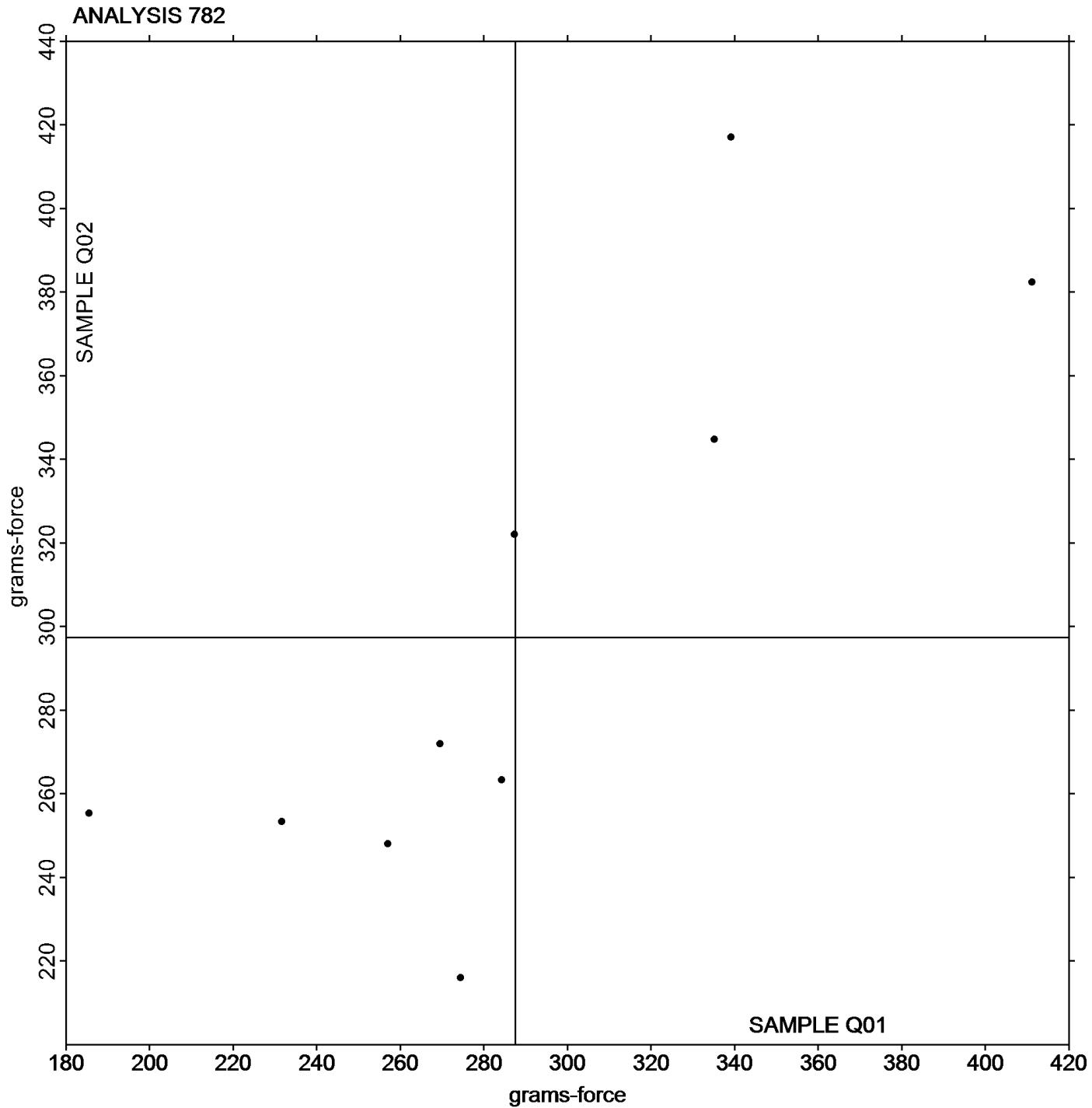
Report #130

Analysis 782

2nd Qtr 2024

Tear Resistance of Films

Grand Mean Sample Q01: 287.52 grams-force Grand Mean Sample Q02: 297.44 grams-force



If fewer than 20 laboratories are included in an analysis, a control ellipse will not be drawn on the two-sample plot.



Plastics Interlaboratory Testing Program

Analysis 785

Percent Haze of Film

Report #130

2nd Qtr 2024

WebCode	Data Flag	Sample D01			Sample D02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2ELMDG		19.688	0.749	0.95	19.688	0.586	0.63	BJ
6WUWW6		18.554	-0.385	-0.49	18.529	-0.572	-0.61	XR
7ADQVC		18.200	-0.738	-0.93	18.963	-0.139	-0.15	BJ
8TPQND		19.165	0.227	0.29	19.876	0.775	0.83	BT
8WN4AG		19.150	0.212	0.27	20.525	1.424	1.53	BJ
B2PNGW	*	17.696	-1.242	-1.57	16.708	-2.394	-2.56	XR
C66HV9		18.529	-0.410	-0.52	18.476	-0.625	-0.67	XX
DZNA8A	*	16.875	-2.063	-2.61	17.488	-1.614	-1.73	HL
G8VBU9		19.413	0.474	0.60	18.950	-0.151	-0.16	BJ
HZQTXT		19.075	0.137	0.17	19.238	0.136	0.15	BJ
JB7ZAM		18.625	-0.313	-0.40	19.425	0.324	0.35	BJ
KG7UPZ		20.390	1.452	1.84	20.860	1.759	1.88	XR
L79CUR		19.913	0.974	1.23	19.800	0.699	0.75	BJ
LCV7P4		19.388	0.449	0.57	19.550	0.449	0.48	BJ
M2R47R		19.450	0.512	0.65	19.725	0.624	0.67	BJ
NDV334		19.270	0.332	0.42	19.465	0.364	0.39	BJ
NHBBQ3		18.800	-0.138	-0.18	19.263	0.161	0.17	BJ
P3UTHZ		18.738	-0.201	-0.25	19.213	0.111	0.12	BJ
PNBC7M		19.698	0.759	0.96	19.495	0.394	0.42	BJ
QCT32U		17.513	-1.426	-1.80	17.068	-2.034	-2.18	HL
QCY2GC		19.088	0.149	0.19	19.175	0.074	0.08	BJ
R69B8L		17.973	-0.966	-1.22	18.030	-1.071	-1.15	XR
T6NURJ		18.888	-0.051	-0.06	19.263	0.161	0.17	BJ
U93P6V		19.638	0.699	0.88	19.363	0.261	0.28	BJ
UYJDV4		18.875	-0.063	-0.08	18.600	-0.501	-0.54	BJ
Y69JF8		19.850	0.912	1.15	19.460	0.359	0.38	BJ
YD3KZR		18.900	-0.038	-0.05	19.538	0.436	0.47	BJ

Summary Statistics		Sample D01	Sample D02
Grand Means		18.9384 Percent	19.1011 Percent
Stnd Dev Btwn Labs		0.7904 Percent	0.9332 Percent

Statistics based on 27 of 27 reporting participants

Sample D01: LDPE & Sample D02: LDPE



Plastics Interlaboratory Testing Program

Analysis 785

Percent Haze of Film

Report #130

2nd Qtr 2024

Key to Instrument Codes Reported by Participants

BJ BYK-Gardner Haze-Gard Plus/i

BT BYK Gardner TCS Series

HL Hunterlab Ultrascan

XR X-Rite Spectrocolorimeter (any model)

XX Instrument make/model not specified by lab



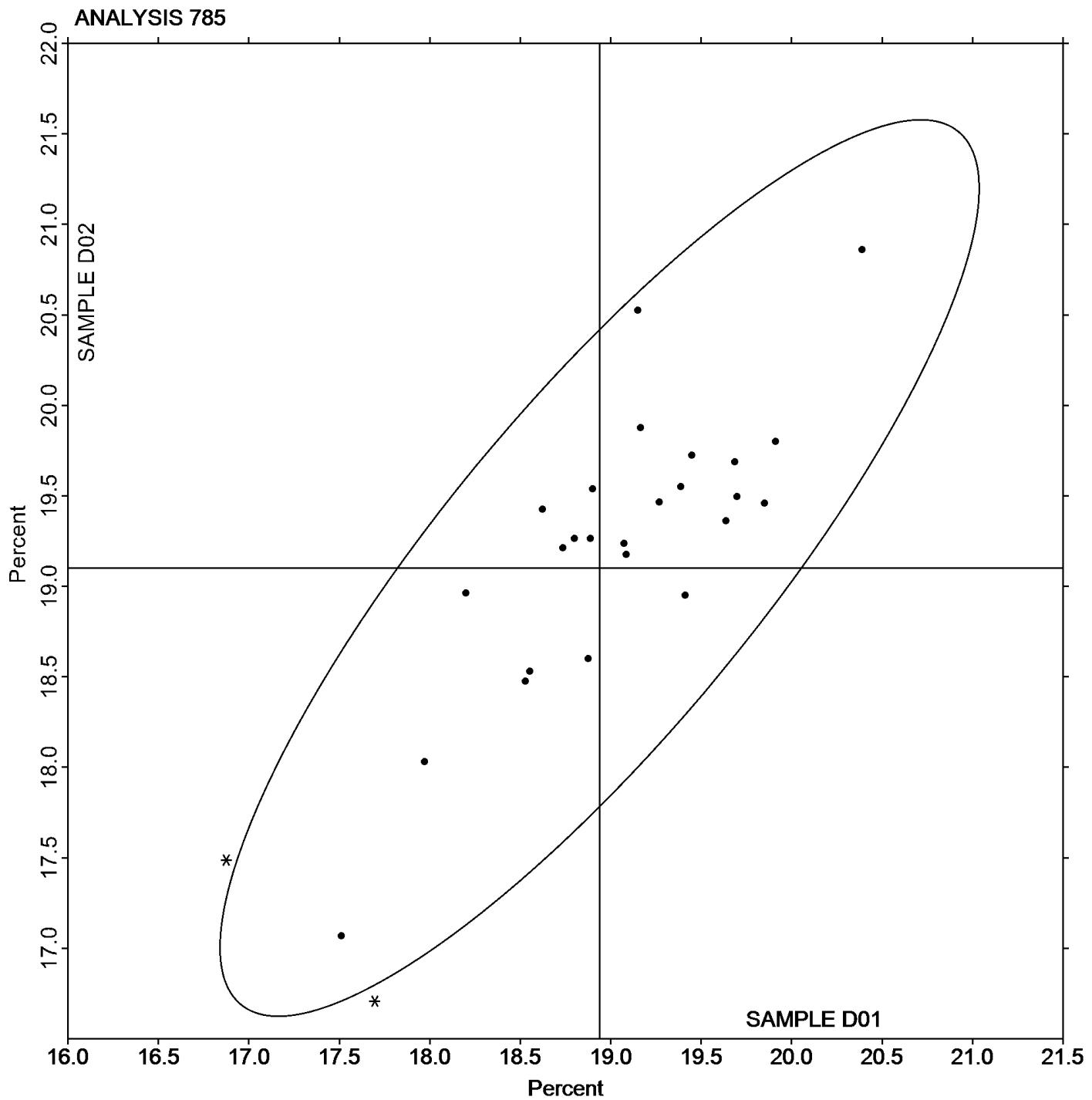
Plastics Interlaboratory Testing Program

Analysis 785 Percent Haze of Film

Report #130

2nd Qtr 2024

Grand Mean Sample D01: 18.938 Percent Grand Mean Sample D02: 19.101 Percent





Plastics Interlaboratory Testing Program

Analysis 786

Report #130

2nd Qtr 2024

Total Luminous Transmittance of Film

WebCode	Data Flag	Sample D01			Sample D02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2ELMDG		92.30	-0.29	-0.24	92.33	-0.25	-0.21	BJ
6WUWW6		91.01	-1.58	-1.33	90.99	-1.58	-1.36	XR
7ADQVC		93.24	0.65	0.54	93.29	0.72	0.61	BJ
8TPQND	X	17.79	-74.80	-62.84	18.46	-74.11	-63.49	BT
8WN4AG		93.06	0.47	0.40	92.91	0.34	0.29	BJ
C66HV9		91.59	-1.00	-0.84	91.56	-1.01	-0.86	XX
DZNA8A		90.39	-2.20	-1.85	90.48	-2.10	-1.80	HL
G8VBU9		93.68	1.08	0.91	93.68	1.10	0.95	BJ
HZQTXT		92.75	0.16	0.13	92.71	0.14	0.12	BJ
JB7ZAM		92.50	-0.09	-0.08	92.55	-0.02	-0.02	BJ
KG7UPZ		91.82	-0.77	-0.65	91.81	-0.76	-0.65	XR
L79CUR		94.16	1.57	1.32	94.11	1.54	1.32	BJ
LCV7P4		94.06	1.47	1.24	94.01	1.44	1.23	BJ
M2R47R		93.63	1.03	0.87	93.61	1.04	0.89	BJ
NDV334		93.12	0.53	0.45	93.01	0.44	0.37	BJ
NHBBQ3		92.91	0.32	0.27	92.94	0.37	0.31	BJ
P3UTHZ	*	89.69	-2.90	-2.44	89.63	-2.95	-2.52	BJ
PNBC7M		92.65	0.06	0.05	92.71	0.13	0.11	BJ
QCT32U		90.68	-1.92	-1.61	90.83	-1.75	-1.50	HL
QCY2GC		93.56	0.97	0.82	93.64	1.07	0.91	BJ
R69B8L		91.43	-1.16	-0.98	91.44	-1.13	-0.97	XR
T6NURJ		93.18	0.58	0.49	92.93	0.35	0.30	BJ
U93P6V		93.26	0.67	0.56	93.30	0.73	0.62	BJ
UYJDV4		93.35	0.76	0.64	93.14	0.57	0.49	BJ
Y69JF8		93.46	0.87	0.73	93.48	0.90	0.77	BJ
YD3KZR		93.30	0.71	0.60	93.24	0.67	0.57	BJ

Summary Statistics

Sample D01

Sample D02

Grand Means

92.591 Percent

92.571 Percent

Stnd Dev Btwn Labs

1.190 Percent

1.167 Percent

Statistics based on 25 of 26 reporting participants

Sample D01: LDPE & Sample D02: LDPE

Comments on Assigned Data Flags for Test #786

8TPQND (X) - Extreme data.



Plastics Interlaboratory Testing Program
Analysis 786
Total Luminous Transmittance of Film

Report #130
2nd Qtr 2024

Key to Instrument Codes Reported by Participants

- | | | | |
|-----------|--|-----------|--|
| BJ | BYK-Gardner Haze-Gard Plus/i | BT | BYK Gardner TCS Plus Spectrophotometer |
| HL | Hunterlab Ultrascan XE | XR | X-Rite Spectrocolorimeter (any model) |
| XX | Instrument make/model not specified by lab | | |



Plastics Interlaboratory Testing Program

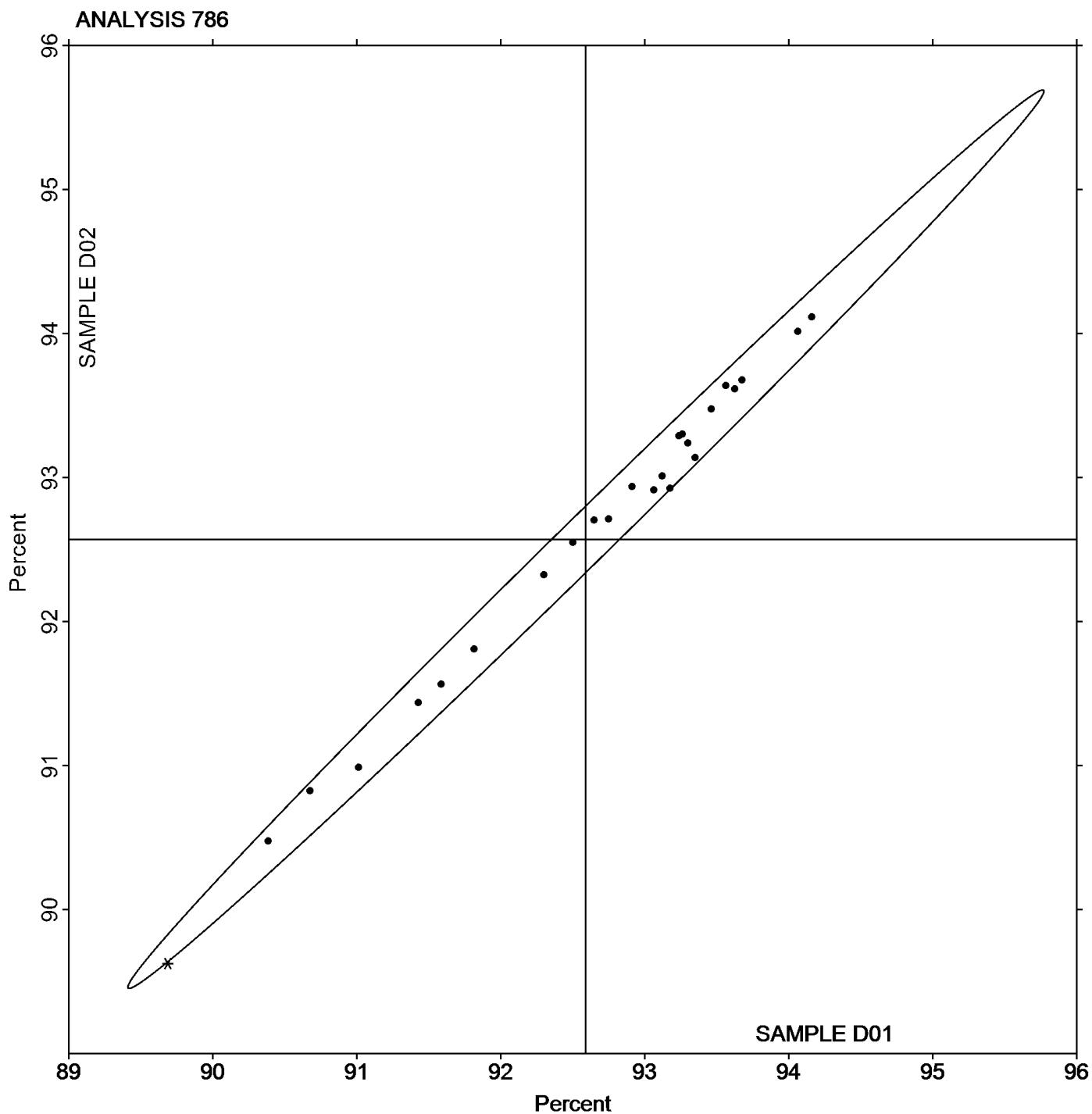
Analysis 786

Report #130

2nd Qtr 2024

Total Luminous Transmittance of Film

Grand Mean Sample D01: 92.591 Percent Grand Mean Sample D02: 92.571 Percent





Plastics Interlaboratory Testing Program

Analysis 790

Notched Izod Impact - ft.lbf/in

Report #130

2nd Qtr 2024

WebCode	Data Flag	Sample S01			Sample S02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
24MPR3	X	1.73	-1.98	-5.74	1.77	-1.97	-5.65	WZ
36E6FJ	M	No data reported for this sample			4.21	0.47	1.35	IN
3RP9DL		3.71	-0.01	-0.04	3.86	0.12	0.35	XX
4HE43G		3.94	0.22	0.65	3.91	0.18	0.51	BA
732MYB		3.44	-0.28	-0.81	3.46	-0.28	-0.80	TO
7C6PAB		3.65	-0.07	-0.21	3.89	0.15	0.44	TO
823Q22		3.77	0.06	0.16	3.53	-0.21	-0.59	TO
9CZXJ7		3.67	-0.05	-0.14	3.78	0.05	0.14	XX
A8U6CC		3.58	-0.14	-0.39	3.55	-0.19	-0.53	CE
AQ9KWT	X	18.57	14.85	42.93	18.57	14.84	42.61	XX
BD3LUD		3.25	-0.47	-1.36	3.20	-0.54	-1.55	TO
BF9ZH8		3.95	0.23	0.67	3.91	0.18	0.52	TO
CWAFTX		4.05	0.33	0.97	4.04	0.30	0.87	CE
DJJ4UT		3.77	0.05	0.15	4.09	0.35	1.02	IN
DNWN2E		3.79	0.07	0.19	3.69	-0.04	-0.13	IN
EVA99		3.37	-0.35	-1.00	3.54	-0.20	-0.56	TO
FXQUT4		4.48	0.77	2.21	4.41	0.67	1.93	TO
GX6PQV		3.88	0.16	0.47	4.24	0.51	1.46	TO
GXQ4E9		4.02	0.30	0.86	4.09	0.36	1.03	TM
HZQXTT		3.89	0.17	0.49	3.79	0.06	0.17	CE
JB7ZAM		3.50	-0.22	-0.64	3.63	-0.11	-0.31	TO
M2A7QL		4.47	0.75	2.16	4.30	0.56	1.62	TM
NAVR84		3.83	0.12	0.33	3.78	0.05	0.14	TY
NDV334		3.81	0.09	0.26	3.83	0.10	0.29	TY
NGX2DW		3.65	-0.07	-0.19	3.89	0.15	0.44	TO
NHBBQ3		3.59	-0.13	-0.36	3.66	-0.08	-0.22	TO
NJM6BA		3.39	-0.33	-0.95	3.66	-0.08	-0.22	TO
P3UTHZ		3.65	-0.07	-0.21	3.70	-0.03	-0.09	WZ
PX3GPN		3.60	-0.12	-0.33	3.60	-0.13	-0.37	TO
PYTTYU		3.57	-0.15	-0.43	3.38	-0.35	-1.01	WZ
QRP7KY		3.53	-0.19	-0.56	3.85	0.12	0.33	DS
RD74FF		4.21	0.49	1.42	4.23	0.49	1.41	TM
T6NURJ		3.47	-0.25	-0.73	3.45	-0.29	-0.82	WZ
TA4FKQ	*	2.71	-1.01	-2.92	2.65	-1.08	-3.11	SA
U3X8AF		4.00	0.28	0.81	4.10	0.36	1.04	XX



Plastics Interlaboratory Testing Program

Analysis 790

Notched Izod Impact - ft.lbf/in

Report #130

2nd Qtr 2024

WebCode	Data Flag	Sample S01			Sample S02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
UGZGDP		3.49	-0.23	-0.66	3.34	-0.39	-1.13	TO
W3AGJT		3.58	-0.14	-0.40	3.53	-0.20	-0.58	TM
WFGCW3		3.76	0.04	0.11	3.81	0.07	0.21	TO
X3PZ4Q		3.97	0.25	0.73	3.61	-0.12	-0.36	TO
XANR48		3.57	-0.15	-0.44	3.57	-0.16	-0.46	TO
XE2DBT		4.02	0.30	0.88	3.64	-0.09	-0.26	CE
XQB4YL		3.38	-0.34	-0.97	3.50	-0.24	-0.69	WZ
YD3KZR		3.72	0.00	-0.01	3.80	0.06	0.18	CE
YTDBVJ		3.80	0.08	0.24	3.68	-0.06	-0.17	WZ
Z96D2F		3.45	-0.27	-0.77	3.60	-0.14	-0.39	WZ
ZCYLUN		3.13	-0.59	-1.70	3.05	-0.68	-1.96	TO
ZPQBR9		4.57	0.85	2.45	4.51	0.78	2.23	WZ

Summary Statistics	Sample S01	Sample S02
Grand Means	3.719 ft.lbf/in	3.735 ft.lbf/in
Stnd Dev Btwn Labs	0.346 ft.lbf/in	0.348 ft.lbf/in

Statistics based on 44 of 47 reporting participants

Sample S01: ABS & Sample S02: ABS

Comments on Assigned Data Flags for Test #790

36E6FJ (M) - Participant did not submit data for sample S01.

24MPR3 (X) - Data for both samples are low. Possible Systematic Error.

AQ9KWT (X) - Extreme data.

Key to Instrument Codes Reported by Participants

BA	Baldwin	CE	Ceast
DS	Dynisco	IN	Instron
SA	Satec	TM	TMI
TO	Tinius Olsen	TY	Toyoseiki
WZ	Zwick	XX	Instrument manufacturer not specified by lab



Plastics Interlaboratory Testing Program

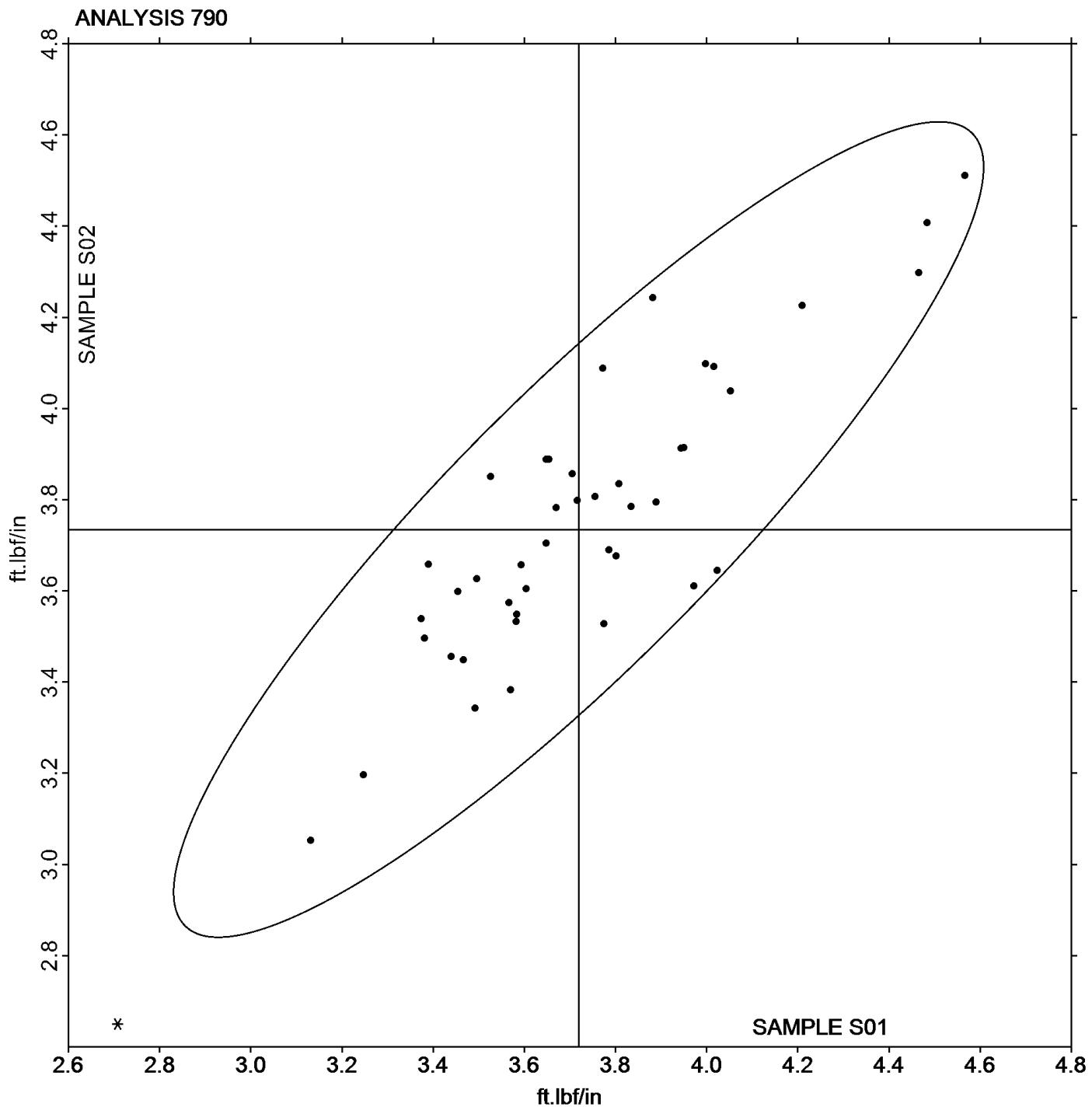
Analysis 790

Notched Izod Impact - ft.lbf/in

Report #130

2nd Qtr 2024

Grand Mean Sample S01: 3.7190 ft.lbf/in Grand Mean Sample S02: 3.7345 ft.lbf/in





Plastics Interlaboratory Testing Program

Report #130

Analysis 791

2nd Qtr 2024

Notched Izod Impact - kJ/m²

WebCode	Data Flag	Sample Z01			Sample Z02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2Q2AN4	*	50.26	5.94	1.84	47.62	3.28	1.11	CE
384ACW		40.09	-4.23	-1.31	40.54	-3.80	-1.29	WZ
3RP9DL		41.74	-2.58	-0.80	42.56	-1.78	-0.60	XX
44CWNB		41.26	-3.06	-0.95	40.92	-3.42	-1.16	CE
823Q22		41.55	-2.77	-0.86	40.04	-4.30	-1.46	TO
8FX9QY		44.41	0.09	0.03	44.44	0.10	0.03	XX
9CZXJ7		41.76	-2.56	-0.79	42.34	-2.00	-0.68	XX
9ND2NG		43.38	-0.95	-0.29	44.14	-0.20	-0.07	CE
9P3F7Y	X	47.09	2.77	0.86	53.75	9.41	3.19	TY
CNWEFA		47.90	3.57	1.10	47.98	3.64	1.23	WZ
CPE7RE		49.28	4.96	1.53	49.56	5.22	1.77	TO
CXLCX3		48.48	4.15	1.28	47.47	3.13	1.06	IN
EYPHW9		44.38	0.05	0.02	42.90	-1.44	-0.49	CE
JLNKUJ		48.16	3.84	1.19	47.90	3.56	1.21	CE
KLMX4X		38.44	-5.88	-1.82	38.16	-6.18	-2.10	CE
L323FF		44.17	-0.16	-0.05	45.24	0.90	0.31	IN
L8ENL2		48.13	3.81	1.18	49.09	4.75	1.61	XX
N6PXET		47.93	3.60	1.11	47.00	2.66	0.90	TO
NAVR84		45.20	0.87	0.27	45.08	0.74	0.25	TY
NDV334		45.48	1.15	0.36	45.13	0.79	0.27	XX
NHBBQ3		46.36	2.03	0.63	45.18	0.84	0.29	TO
NHPW3Q		44.22	-0.10	-0.03	44.25	-0.08	-0.03	TO
NJM6BA	*	35.18	-9.14	-2.83	37.52	-6.82	-2.31	TO
P9HHWH		42.06	-2.27	-0.70	42.46	-1.88	-0.64	IN
PYTTYU		46.68	2.35	0.73	47.73	3.39	1.15	WZ
TRYVXW		43.96	-0.36	-0.11	43.44	-0.90	-0.31	WZ
U93P6V		45.38	1.06	0.33	45.88	1.54	0.52	XX
UBA84R		44.34	0.02	0.01	43.83	-0.51	-0.17	CE
X3PZ4Q		42.07	-2.25	-0.70	42.87	-1.47	-0.50	XX
XANR48		43.28	-1.04	-0.32	43.74	-0.60	-0.20	TO
YD3KZR		44.53	0.21	0.06	45.85	1.51	0.51	CE
YTDBVJ		43.83	-0.49	-0.15	43.34	-1.00	-0.34	WZ
YVJTTF		44.50	0.18	0.05	44.66	0.32	0.11	TO



Plastics Interlaboratory Testing Program

Analysis 791

Report #130

2nd Qtr 2024

Notched Izod Impact - kJ/m²

Summary Statistics

Sample Z01

Sample Z02

Grand Means

44.325 kJ/m²

44.339 kJ/m²

Stnd Dev Btwn Labs

3.233 kJ/m²

2.946 kJ/m²

Statistics based on 32 of 33 reporting participants

Sample Z01: ABS/PC & Sample Z02: ABS/PC

Comments on Assigned Data Flags for Test #791

9P3F7Y (X) - Data for sample Z02 are high.

Key to Instrument Codes Reported by Participants

CE Ceast

IN Instron

TO Tinius Olsen

TY Toyoseiki

WZ Zwick

XX Instrument manufacturer not specified by lab



Plastics Interlaboratory Testing Program

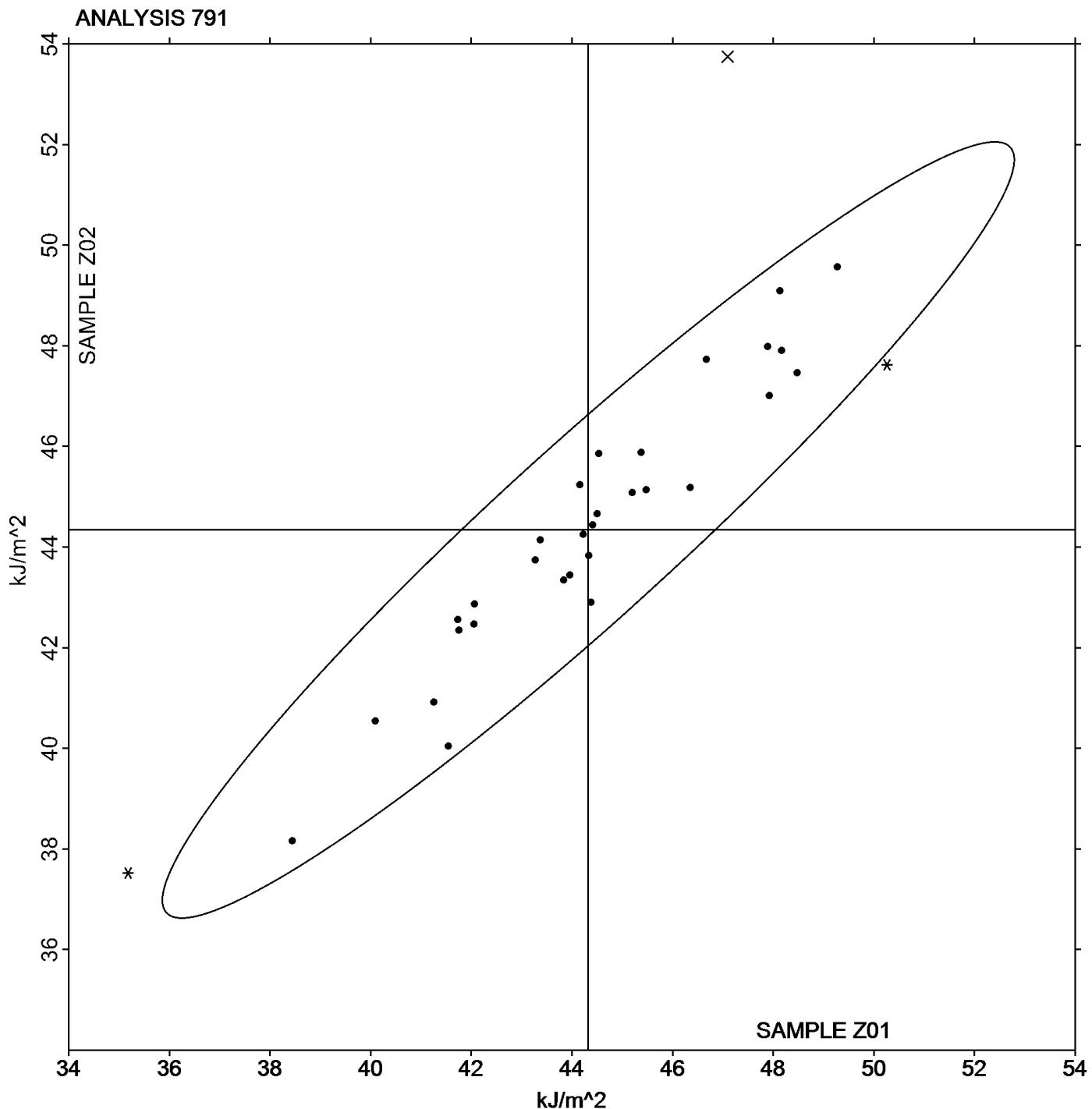
Analysis 791

Report #130

2nd Qtr 2024

Notched Izod Impact - kJ/m^2

Grand Mean Sample Z01: 44.325 kJ/m^2 Grand Mean Sample Z02: 44.339 kJ/m^2





Plastics Interlaboratory Testing Program

Analysis 792

Report #130

2nd Qtr 2024

Notched Charpy Impact - kJ/m ^ 2

WebCode	Data Flag	Sample M01			Sample M02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
2Q2AN4		8.61	0.07	0.19	8.57	0.07	0.18	CE
384ACW		8.20	-0.34	-0.92	8.20	-0.29	-0.72	WZ
3RP9DL		8.04	-0.49	-1.34	8.01	-0.49	-1.21	XX
44CWNB		7.70	-0.83	-2.26	7.70	-0.80	-1.98	CE
6Huzrl		8.97	0.43	1.18	8.75	0.26	0.64	CE
7F6Z6A	X	8.11	-0.43	-1.16	8.66	0.17	0.42	TM
823Q22	X	67.81	59.27	160.69	66.24	57.74	143.21	TO
8FX9QY		9.11	0.58	1.57	9.32	0.82	2.04	XX
9CZXJ7		7.93	-0.61	-1.65	7.83	-0.66	-1.64	XX
9ND2NG		8.88	0.34	0.93	8.63	0.14	0.34	CE
9P3F7Y		8.38	-0.16	-0.42	8.39	-0.11	-0.27	TY
A8U6CC		9.34	0.80	2.17	9.39	0.89	2.21	IN
BD3LUD		8.31	-0.23	-0.62	8.16	-0.34	-0.84	TO
CGUHLC		7.94	-0.59	-1.61	7.94	-0.55	-1.37	CE
CNWEFA		9.02	0.48	1.31	9.18	0.68	1.69	WZ
CPE7RE		8.73	0.19	0.51	8.51	0.01	0.03	TO
DNWN2E		8.42	-0.12	-0.33	8.46	-0.04	-0.09	IN
E4NUYZ		8.86	0.32	0.87	8.59	0.09	0.23	CE
EVQ829		8.91	0.38	1.02	8.83	0.34	0.84	TO
EYPHW9		8.69	0.16	0.43	8.85	0.35	0.88	CE
FXQUT4	X	10.16	1.62	4.40	10.12	1.63	4.04	TO
GWDT22		8.44	-0.10	-0.26	8.51	0.01	0.03	XX
H3HPMM		8.91	0.38	1.02	8.94	0.44	1.09	WZ
JLNKUJ		9.25	0.72	1.95	9.28	0.78	1.94	CE
KLMX4X		8.47	-0.06	-0.18	8.50	0.00	0.00	CE
L323FF		8.92	0.38	1.04	8.76	0.26	0.66	IN
L8ENL2		8.47	-0.06	-0.17	8.42	-0.08	-0.20	WZ
LNNKVR		8.38	-0.15	-0.41	8.35	-0.15	-0.36	TM
M8AQQV	X	9.87	1.33	3.60	9.55	1.06	2.62	PO
NDV334		8.46	-0.07	-0.20	8.41	-0.08	-0.20	TY
NHBBQ3		8.29	-0.24	-0.66	8.26	-0.23	-0.57	TO
NHPW3Q		8.44	-0.10	-0.27	8.30	-0.20	-0.49	TO
NJM6BA	*	7.58	-0.96	-2.59	7.30	-1.20	-2.97	TO
P3UTHZ		8.21	-0.33	-0.89	8.10	-0.40	-0.98	WZ
P6H7ZH		8.91	0.37	1.01	8.85	0.35	0.87	TO



Plastics Interlaboratory Testing Program

Analysis 792

Report #130

2nd Qtr 2024

Notched Charpy Impact - kJ/m²

WebCode	Data Flag	Sample M01			Sample M02			Instr Code
		Lab Mean	Diff from Grand Mean	CPV	Lab Mean	Diff from Grand Mean	CPV	
P9HHWH		8.42	-0.12	-0.32	8.43	-0.07	-0.17	IN
PX3GPN		8.56	0.02	0.06	8.60	0.10	0.26	TO
PYTTYU		8.41	-0.12	-0.33	8.26	-0.24	-0.58	WZ
QCT32U		8.37	-0.17	-0.46	8.48	-0.01	-0.03	TO
RJV8XK		8.64	0.10	0.27	8.51	0.01	0.03	IN
RK8B3V		8.70	0.17	0.45	8.59	0.09	0.23	CE
T6NURJ		8.07	-0.47	-1.27	8.18	-0.32	-0.79	WZ
TQ9WKX		8.40	-0.14	-0.37	8.53	0.03	0.08	WZ
TRYVXW		8.50	-0.03	-0.09	8.37	-0.13	-0.31	WZ
U3X8AF	X	12.50	3.96	10.75	12.50	4.00	9.93	XX
U93P6V		8.76	0.22	0.60	8.86	0.37	0.91	WZ
UBA84R		8.36	-0.18	-0.49	8.25	-0.25	-0.61	CE
WDQBNU		8.52	-0.01	-0.04	8.22	-0.28	-0.69	WZ
WTKV83		9.05	0.51	1.39	9.05	0.55	1.37	WZ
X3PZ4Q		8.77	0.23	0.63	8.93	0.43	1.07	TO
XE2DBT		8.59	0.05	0.14	8.53	0.03	0.08	WZ
YD3KZR		8.50	-0.04	-0.10	8.46	-0.04	-0.09	CE
YTDBVJ		8.49	-0.04	-0.12	8.42	-0.08	-0.20	WZ
YVJTTF		8.40	-0.13	-0.36	8.38	-0.12	-0.29	TO
ZPQBR9	X	10.04	1.51	4.08	10.08	1.58	3.92	XX

Summary Statistics

Sample M01

Sample M02

Grand Means

8.537 kJ/m²

8.496 kJ/m²

Stnd Dev Btwn Labs

0.369 kJ/m²

0.403 kJ/m²

Statistics based on 49 of 55 reporting participants

Sample M01: HIPS & Sample M02: HIPS

Comments on Assigned Data Flags for Test #792

FXQUT4 (X) - Data for both samples are high. Possible Systematic Error.

M8AQQV (X) - Data for sample M01 are high.

ZPQBR9 (X) - Data for both samples are high. Possible Systematic Error.

823Q22 (X) - Extreme data.

U3X8AF (X) - Data for both samples are high. Possible Systematic Error.

7F6Z6A (X) - Inconsistent in testing between samples. Inconsistent within the determinations of sample M02.



Plastics Interlaboratory Testing Program

Analysis 792

Notched Charpy Impact - kJ/m²

Report #130

2nd Qtr 2024

Key to Instrument Codes Reported by Participants

CE Ceast

PO POE

TO Tinius Olsen

WZ Zwick

IN Instron

TM TMI

TY Toyoseiki

XX Instrument manufacturer not specified by lab



Plastics Interlaboratory Testing Program

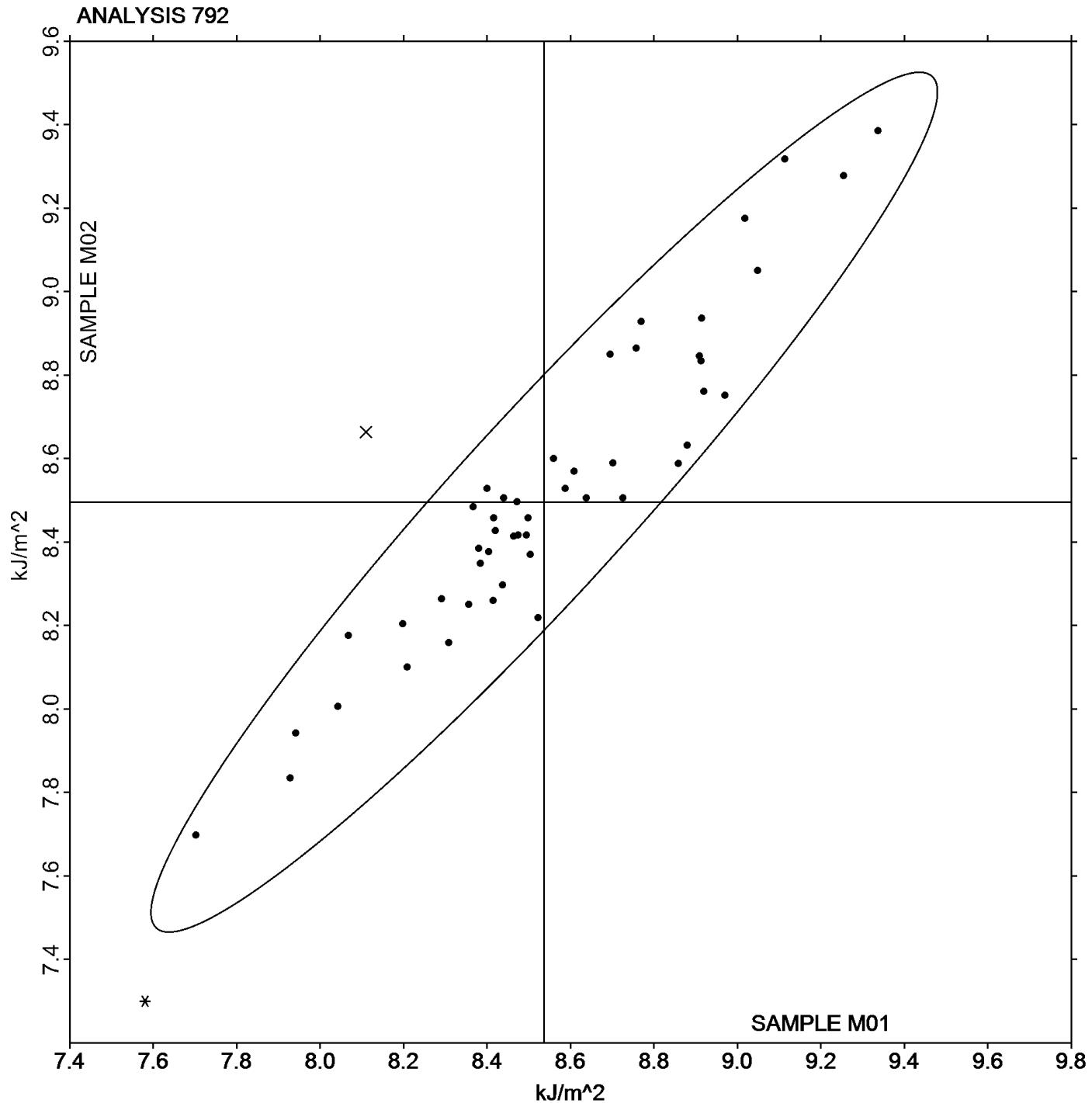
Analysis 792

Report #130

2nd Qtr 2024

Notched Charpy Impact - kJ/m^2

Grand Mean Sample M01: 8.5366 kJ/m^2 Grand Mean Sample M02: 8.4957 kJ/m^2



-End of Report-