Institute for
Interlaboratory Studies

Results of Proficiency Test
Colorants (Banned Dyes) in Textile
May 2023

Organized by: Institute for Interlaboratory Studies
Spijkenisse, the Netherlands

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1 INTRODUCTION

Colored fabrics, when in contact with human skin, may cause Allergic Contact Dermatitis. Several dyestuffs are therefore classified as allergenic, potential carcinogenic or banned for other reasons. The OEKOTEX® Standard 100 and the BlueSign RSL list many allergenic, carcinogenic and other banned dyestuffs.

Since 2005 the Institute for Interlaboratory Studies (iis) organizes a proficiency scheme for the determination of Colorants (Banned Dyes only) in Textile every year. In 2016 the scope was extended with carcinogenic and other banned dyes. During the annual proficiency testing program 2022/2023 it was decided to continue the proficiency test for the determination of Colorants (Banned Dyes) in Textile.

In this interlaboratory study 84 laboratories in 25 countries registered for participation, see appendix 4 for the number of participants per country. In this report the results of the Colorants (Banned Dyes) in Textile proficiency test are presented and discussed. This report is also electronically available through the iis website www.iisnl.com.

2 SET UP

The Institute for Interlaboratory Studies (iis) in Spijkenisse, the Netherlands, was the organizer of this proficiency test (PT). Sample analyzes for fit-for-use and homogeneity testing were subcontracted to an ISO/IEC17025 accredited laboratory.
It was decided to send 2 different textile samples of approximately 3 grams each labelled #23605 and #23606 respectively.
The participants were requested to report rounded and unrounded test results. The unrounded test results were preferably used for statistical evaluation.

2.1 ACCREDITATION

The Institute for Interlaboratory Studies in Spijkenisse, the Netherlands, is accredited in agreement with ISO/IEC17043:2010 (R007), since January 2000, by the Dutch Accreditation Council (Raad voor Accreditatie). This PT falls under the accredited scope. This ensures strict adherence to protocols for sample preparation and statistical evaluation and 100% confidentiality of participant's data. Feedback from the participants on the reported data is encouraged and customer's satisfaction is measured on regular basis by sending out questionnaires.

2.2 PROTOCOL

The protocol followed in the organization of this proficiency test was the one as described for proficiency testing in the report 'iis Interlaboratory Studies: Protocol for the Organisation, Statistics and Evaluation' of June 2018 (iis-protocol, version 3.5). This protocol is electronically available through the iis website www.iisnl.com, from the FAQ page.

2.3 CONFIDENTIALITY STATEMENT

All data presented in this report must be regarded as confidential and for use by the participating companies only. Disclosure of the information in this report is only allowed by means of the entire report. Use of the contents of this report for third parties is only allowed by written permission of the Institute for Interlaboratory Studies. Disclosure of the identity of one or more of the participating companies will be done only after receipt of a written agreement of the companies involved.

2.4 SAMPLES

For the first sample a batch of orange cotton was selected which was dyed with allergenic colorants Disperse Red 1 and Disperse Yellow 3 by a third party. This batch was cut into small pieces. After homogenization 100 small plastic bags were filled with approximately 3 grams each and labelled #23605.
The batch was used in a previous proficiency test on Colorants (Banned Dyes) as sample #19523 in PT iis19A06. Therefore, homogeneity of the subsamples was assumed.

For the second sample a batch of purple acrylic was selected which was dyed with a carcinogenic colorant Basic Violet 3 by a third party. This batch was cut into small pieces. After homogenization 100 small plastic bags were filled with approximately 3 grams each and labelled #23606.
The batch was used in a previous proficiency test on Colorants (Banned Dyes) as sample #21556 in PT iis21T05. Therefore, homogeneity of the subsamples was assumed.

To each of the participating laboratories two textile samples labelled #23605 and #23606 respectively were sent on May 3, 2023.

2.5 ANALYZES

The participants were requested to determine the concentrations of 22 banned allergenic dyes, 9 banned carcinogenic dyes and 6 other banned dyes applying the analysis procedure that is routinely used in the laboratory. See the list of colorants in appendix 2.
To ensure homogeneity, it was requested not to use less than 0.5 grams per determination.
It was requested to report if the laboratory was accredited for the determined components and to report some analytical details.

It was explicitly requested to treat the samples as if they were routine samples and to report the test results using the indicated units on the report form and not to round the test results but report as much significant figures as possible. It was also requested not to report ‘less than’ test results, which are above the detection limit, because such test results cannot be used for meaningful statistical evaluations.

To get comparable test results a detailed report form and a letter of instructions are prepared. On the report form the reporting units are given as well as the reference test method (when applicable) that will be used during the evaluation. The detailed report form and the letter of instructions are both made available on the data entry portal www.kpmd.co.uk/sgs-iis-cts/.
The participating laboratories are also requested to confirm the sample receipt on this data

entry portal. The letter of instructions can also be downloaded from the iis website www.iisnl.com.

3 RESULTS

During five weeks after sample dispatch, the test results of the individual laboratories were gathered via the data entry portal www.kpmd.co.uk/sgs-iis-cts/. The reported test results are tabulated per determination in appendices 1 and 2 of this report. The laboratories are presented by their code numbers.

Directly after the deadline, a reminder was sent to those laboratories that had not reported test results at that moment. Shortly after the deadline, the available test results were screened for suspect data. A test result was called suspect in case the Huber Elimination Rule (a robust outlier test) found it to be an outlier. The laboratories that produced these suspect data were asked to check the reported test results (no reanalyzes). Additional or corrected test results are used for data analysis and the original test results are placed under 'Remarks' in the result tables in appendices 1 and 2. Test results that came in after the deadline were not taken into account in this screening for suspect data and thus these participants were not requested for checks.

3.1 STATISTICS

The protocol followed in the organization of this proficiency test was the one as described for proficiency testing in the report ‘iis Interlaboratory Studies: Protocol for the Organisation, Statistics and Evaluation’ of June 2018 (iis-protocol, version 3.5).
For the statistical evaluation, the *unrounded* (when available) figures were used instead of the rounded test results. Test results reported as ‘<…’ or ‘>…’ were not used in the statistical evaluation.

First, the normality of the distribution of the various data sets per determination was checked by means of the Lilliefors-test, a variant of the Kolmogorov-Smirnov test and by the calculation of skewness and kurtosis. Evaluation of the three normality indicators in combination with the visual evaluation of the graphic Kernel density plot, lead to judgement of the normality being either ‘unknown’, ‘OK’, ‘suspect’ or ‘not OK’. After removal of outliers, this check was repeated. If a data set does not have a normal distribution, the (results of the) statistical evaluation should be used with due care.

The assigned value is determined by consensus based on the test results of the group of participants after rejection of the statistical outliers and/or suspect data.

According to ISO13528 all (original received or corrected) results per determination were submitted to outlier tests. In the iis procedure for proficiency tests, outliers are detected prior to calculation of the mean, standard deviation and reproducibility. For small data sets, Dixon (up to 20 test results) or Grubbs (up to 40 test results) outlier tests can be used. For larger data sets (above 20 test results) Rosner’s outlier test can be used. Outliers are marked by D(0.01) for the Dixon’s test, by G(0.01) or DG(0.01) for the Grubbs’ test and by R(0.01) for the Rosner’s test. Stragglers are marked by D(0.05) for the Dixon’s test, by G(0.05) or

DG(0.05) for the Grubbs' test and by R(0.05) for the Rosner's test. Both outliers and stragglers were not included in the calculations of averages and standard deviations.

For each assigned value, the uncertainty was determined in accordance with ISO13528. Subsequently the calculated uncertainty was evaluated against the respective requirement based on the target reproducibility in accordance with ISO13528. In this PT, the criterion of ISO13528, paragraph 9.2.1 was met for all evaluated tests, therefore, the uncertainty of all assigned values may be negligible and need not be included in the PT report.

Finally, the reproducibilities were calculated from the standard deviations by multiplying these with a factor of 2.8.

3.2 GRAPHICS

In order to visualize the data against the reproducibilities from literature, Gauss plots were made, using the sorted data for one determination (see appendix 1). On the Y-axis the reported test results are plotted. The corresponding laboratory numbers are on the X-axis. The straight horizontal line presents the consensus value (a trimmed mean). The four striped lines, parallel to the consensus value line, are the +3s, +2s, -2s and -3s target reproducibility limits of the selected reference test method. Outliers and other data, which were excluded from the calculations, are represented as a cross. Accepted data are represented as a triangle.

Furthermore, Kernel Density Graphs were made. This is a method for producing a smooth density approximation to a set of data that avoids some problems associated with histograms. Also, a normal Gauss curve (dotted line) was projected over the Kernel Density Graph (smooth line) for reference. The Gauss curve is calculated from the consensus value and the corresponding standard deviation.

3.3 Z-SCORES

To evaluate the performance of the participating laboratories the z-scores were calculated. As it was decided to evaluate the performance of the participants in this proficiency test (PT) against the literature requirements derived from e.g. ISO or ASTM test methods), the z-scores were calculated using a target standard deviation. This results in an evaluation independent of the variation of this interlaboratory study.

The target standard deviation was calculated from the literature reproducibility by division with 2.8. In case no literature reproducibility was available, other target values were used, like Horwitz or an estimated reproducibility based on former iis proficiency tests.

When a laboratory did use a test method with a reproducibility that is significantly different from the reproducibility of the reference test method used in this report, it is strongly advised to recalculate the z-score, while using the reproducibility of the actual test method used, this in order to evaluate whether the reported test result is fit-for-use.

The z-scores were calculated according to:

$z_{(target)}$ = (test result - average of PT) / target standard deviation

The $z_{(target)}$ scores are listed in the test result tables in appendix 1.

Absolute values for z<2 are very common and absolute values for z>3 are very rare. Therefore, the usual interpretation of z-scores is as follows:

	|z|	< 1	good
1 <	|z|	< 2	satisfactory
2 <	|z|	< 3	questionable
3 <	|z|		unsatisfactory

4 EVALUATION

In this proficiency test some problems were encountered with the dispatch of the samples. Five participants reported test results after the final reporting date and eight other participants did not report any test results. Not all participants were able to report all tests requested. In total 76 participants reported 227 numerical test results. Observed were 7 outlying test results, which is 3.1 %. In proficiency tests outlier percentages of 3 % - 7.5 % are quite normal.

Not all data sets proved to have a normal Gaussian distribution. These are referred as “not OK” or “suspect”. The statistical evaluation of these data sets should be used with due care, see also paragraph 3.1.

4.1 EVALUATION PER SAMPLE AND PER COMPONENT

In this section the reported test results are discussed per sample and per component. The test methods which were used by the various laboratories were taken into account for explaining the observed differences when possible and applicable. These test methods are also in the tables together with the original data in appendix 1. The abbreviations, used in these tables, are explained in appendix 5.

In DIN54231 no reproducibility is mentioned. Only the standard deviation for the repeatability is mentioned. Therefore, the target reproducibility was estimated as follows: the repeatability standard deviation was multiplied with 2.8 to get the target repeatability. And this was multiplied with 3 to get an estimate of the target reproducibility.

sample #23605

Disperse Red 1 (CAS No. 2872-52-8): The determination was not problematic. Two statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is in agreement with the estimated reproducibility derived from test method DIN54231:05.

Disperse Yellow 3 (CAS No. 2832-40-8): The determination was not problematic. Three statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is in agreement with the estimated reproducibility derived from test method DIN54231:05.

The participants agreed on a concentration near or below the limit of detection for all other colorants mentioned in appendix 2. Therefore, no z-scores were calculated for these components. The test results of these components are mentioned in appendix 2.

sample #23606

Basic Violet 3 (CAS No. 548-62-9): The determination was not problematic. Two statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is in agreement with the estimated reproducibility derived from test method DIN54231:05.

The participants agreed on a concentration near or below the limit of detection for all other colorants mentioned in appendix 2. Therefore, no z-scores were calculated for these components. The test results of these components are mentioned in appendix 2.

4.2 PERFORMANCE EVALUATION FOR THE GROUP OF LABORATORIES

A comparison has been made between the reproducibility as declared by the reference test method and the reproducibility as found for the group of participating laboratories. The number of significant test results, the average, the calculated reproducibility (2.8*standard deviation) and the target reproducibility derived from reference methods are presented in the next tables.

Component	unit	n	average	2.8 * sd	R(lit)
Disperse Red 1	mg/kg	74	242	159	194
Disperse Yellow 3	mg/kg	73	324	199	260

Table 1: reproducibilities of the colorants in textile sample #23605

Component	unit	n	average	2.8 * sd	R(lit)
Basic Violet 3	mg/kg	73	53.0	43.7	42.5

Table 2: reproducibility of the colorant in textile sample #23606

Without further statistical calculations, it can be concluded that for all three components there is a good compliance of the group of participants with the reference test method.

4.3 COMPARISON OF THE PROFICIENCY TEST OF MAY 2023 WITH PREVIOUS PTS

	May 2023	May 2022	March 2021	March 2020	March 2019
Number of reporting laboratories	76	74	82	66	78
Number of test results	227	215	236	202	297
Number of statistical outliers	7	3	9	16	10
Percentage of statistical outliers	3.1%	1.4%	3.8%	7.9%	3.4%

Table 3: comparison with previous proficiency tests

In proficiency tests, outlier percentages of 3% - 7.5% are quite normal.

The performance of the determinations of the proficiency test was compared to uncertainties observed in PTs over the years, expressed as relative standard deviation (RSD) of the PTs, see next table.

	May 2023	May 2022	March 2021	March 2020	2006 – 2019	target DIN54321
Disperse Blue 1	n.e.	n.e.	n.e.	n.e.	43%	27%
Disperse Blue 3	n.e.	69%	n.e.	n.e.	36 – 56%	27%
Disperse Blue 26	n.e.	n.e.	n.e.	n.e.	47 – 68%	27%
Disperse Blue 35	n.e.	n.e.	n.e.	n.e.	31 – 84%	27%
Disperse Blue 102	n.e.	n.e.	n.e.	24%	n.e.	27%
Disperse Blue 106	n.e.	n.e.	n.e.	n.e.	28 – 50%	27%
Disperse Brown 1	n.e.	n.e.	n.e.	n.e.	33 – 39%	27%
Disperse Orange 1	n.e.	29%	n.e.	n.e.	35 – 47%	27%
Disperse Orange 3	n.e.	n.e.	n.e.	n.e.	24 – 54%	27%
Disperse Orange 76/37	n.e.	n.e.	n.e.	33%	33%	27%
Disperse Orange 149	n.e.	n.e.	n.e.	n.e.	21 – 27%	27%
Disperse Red 1	23%	n.e.	n.e.	n.e.	33 – 63%	27%
Disperse Red 11	n.e.	n.e.	n.e.	n.e.	41 – 65%	27%
Disperse Red 17	n.e.	n.e.	30%	n.e.	28 – 33%	27%
Disperse Yellow 1	n.e.	n.e.	21%	n.e.	24%	27%
Disperse Yellow 3	22%	n.e.	n.e.	n.e.	21 – 34%	27%
Disperse Yellow 9	n.e.	n.e.	n.e.	n.e.	21 – 31%	27%
Disperse Yellow 23	n.e.	n.e.	n.e.	n.e.	13 – 17%	27%
Disperse Yellow 49	n.e.	n.e.	n.e.	n.e.	54%	27%
Basic Red 9	n.e.	18%	n.e.	33%	n.e.	27%
Basic Violet 3	29%	n.e.	31%	n.e.	n.e.	27%
Basic Violet 14	n.e.	n.e.	n.e.	29%	n.e.	27%
Direct Black 38	n.e.	n.e.	n.e.	n.e.	32%	27%

Table 4: development of uncertainties over the last years

In comparison with previous PTs it is observed that the performance of the group improved for Disperse Red 1 and Basic Violet 3. Disperse Yellow 3 stayed the same.

Sample #23605 was used in a previous PT as sample #19523 in iis19A06 (2019). In below table a comparison is given over the proficiency tests.

	Sample #23605				Sample #19523			
	unit	n	average	R(calc)	unit	n	average	R(calc)
Disperse Red 1	mg/kg	74	242	159	mg/kg	76	232	217
Disperse Yellow 3	mg/kg	73	324	199	mg/kg	76	283	273

Table 5: comparison of sample #23605 with #19523

The uncertainties of Basic Violet 3 and Disperse Yellow 3 observed in this PT are in line with previous iis PTs. The uncertainty of Disperse Red 1 has been improved.

Sample #23606 was also used in a previous PT as sample #21556 in iis21T05 (2021). In below table a comparison is given over the proficiency tests.

	Sample #23606				Sample #21556			
	unit	n	average	R(calc)	unit	n	average	R(calc)
Basic Violet 3	mg/kg	73	53.0	43.7	mg/kg	76	52.7	45.5

Table 6: comparison of sample #23606 with #21556

It is observed that the group performed in line with the previous determination of Basic Violet 3.

4.4 EVALUATION OF THE ANALYTICAL DETAILS

The test method DIN54231 is used by almost all reporting participants.
For this PT some analytical details were requested which are given in appendix 3. Based on the answers given by the participants the following can be summarized:
- 83% of the reporting participants mentioned that they are accredited for the determination of banned dyes in textile.
- 65% of the reporting laboratories further cut the sample while the other 35% used the sample as received.
- 77% used 0.5 grams or less and 23% used 1 gram as sample intake.

For Disperse Red 1, Disperse Yellow 3 and Basic Violet 3 the calculated reproducibility is in agreement with the requirements of the target reproducibility, therefore no separate statistical analysis has been performed.

5 DISCUSSION

All reporting participants were able to detect Disperse Red 1 and Disperse Yellow 3 in sample #23605 and Basic Violet 3 in sample #23606.
When the results of this interlaboratory study were compared to the Ecolabelling Standards and Requirements for Textiles in EU OEKO-TEX® 100 and with BlueSign® RSL, it was noticed that not all participants would make identical decisions about the acceptability of the textiles for the determined components.

Ecolabel	baby clothes	in direct skin contact	no direct skin contact
BlueSign® RSL	<20 mg/kg	<20 mg/kg	<20 mg/kg
OEKO-TEX® 100	<20 mg/kg	<20 mg/kg	<20 mg/kg

Table 7: BlueSign® RSL and Ecolabelling Standards and Requirements for Textiles in EU

For sample #23605 almost all reporting laboratories would have rejected the sample for containing too much Disperse Red 1 and/or too much Disperse Yellow 3 for all categories.

For sample #23606 all reporting laboratories would have accepted the sample which contained Basic Violet 3 ≥0.1% Milcher’s Ketone for all categories. In OEKO-TEX® 100 is

mentioned that colorants with ≥0.1% Milcher's Ketone or base has a rejection limit of 1000 mg/kg for all categories.

6 CONCLUSION

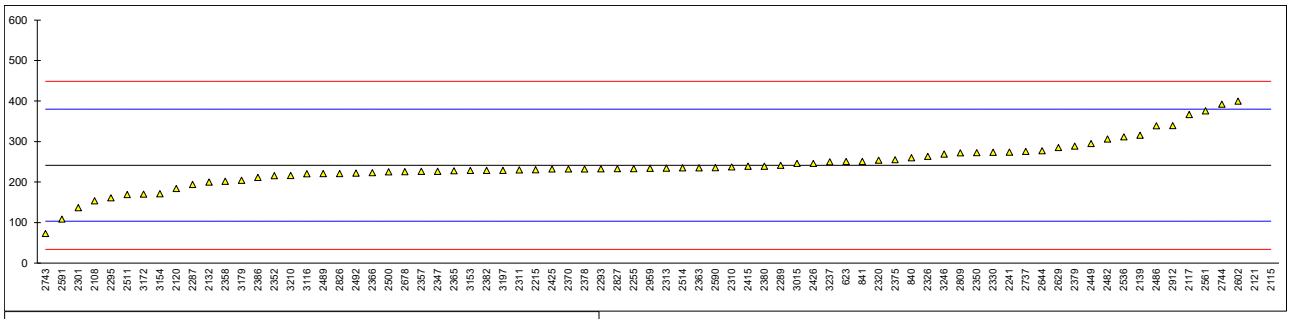
Each participating laboratory will have to evaluate its performance in this study and decide about any corrective actions if necessary. Therefore, participation on a regular basis in this scheme could be helpful to improve the performance and thus increase of the quality of the analytical results.

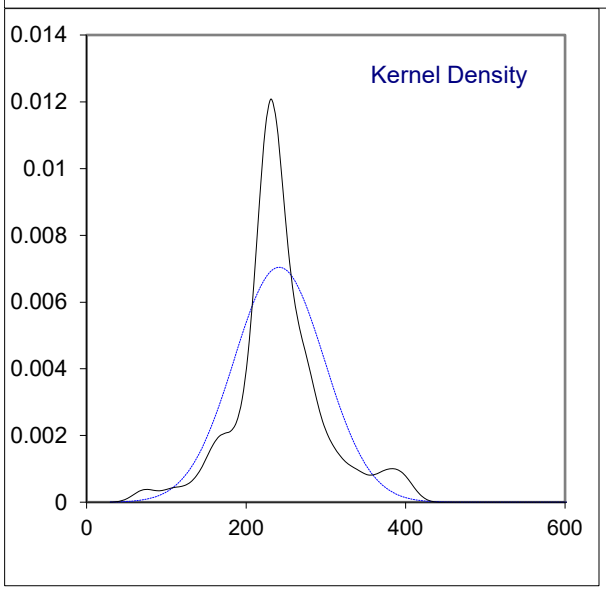
APPENDIX 1

Determination of Disperse Red 1 (CAS No. 2872-52-8) in sample #23605; results in mg/kg

lab	method	value	mark	z(targ)	remarks
210		-----		-----	
362		-----		-----	
551		-----		-----	
623	DIN54231	250.58		0.13	
840		260.1		0.27	
841	DIN54231	251		0.14	
2108	DIN54231	153.7		-1.27	
2115	In house	1820.7	R(0.01)	22.83	
2117	DIN54231	366.67		1.81	
2120	DIN54231	184		-0.83	
2121	In house	1465.8	C,R(0.01)	17.70	First reported 1644.37
2132	DIN54231	199.9		-0.60	
2139	DIN54231	315.5		1.07	
2215	DIN54231	230.31		-0.16	
2241	DIN54231	273.762		0.46	
2255	DIN54231	233.0		-0.12	
2265		-----		-----	
2287	DIN54231	194.0		-0.69	
2289	DIN54231	241		-0.01	
2293	DIN54231	232.46		-0.13	
2295	DIN54231	161		-1.17	
2301	DIN54231	136.8089		-1.52	
2310	DIN54231	237		-0.07	
2311	DIN54231	230		-0.17	
2313	DIN54231	234.1		-0.11	
2320	DIN54231	254		0.18	
2326	DIN54231	263.39		0.31	
2330	DIN54231	273.43		0.46	
2347	DIN54231	226.38		-0.22	
2350	DIN54231	272.17		0.44	
2352	DIN54231	215.7		-0.38	
2357	DIN54231	226.3		-0.22	
2358	DIN54231	202.05		-0.57	
2363	DIN54231	235		-0.10	
2365	DIN54231	227.7		-0.20	
2366	DIN54231	223		-0.27	
2370	DIN54231	232		-0.14	
2375	DIN54231	255		0.19	
2378	DIN54231	232.2		-0.14	
2379	DIN54231	288.73		0.68	
2380	DIN54231	239.1		-0.04	
2382	DIN54231	228.7		-0.19	
2386	DIN54231	211.5	C	-0.44	Reported < 15. Mixed up both samples
2415	DIN54231	239.0		-0.04	
2425	In house	231.9		-0.14	
2426	DIN54231	245.940		0.06	
2449	DIN54231	294.82		0.77	
2482	DIN54231	306.0		0.93	
2486	DIN54231	338.72		1.40	
2489	DIN54231	221		-0.30	
2492		222		-0.28	
2500	DIN54231	225.2		-0.24	
2511	DIN54231	169		-1.05	
2514	In house	234.833		-0.10	
2536	DIN54231	311.32		1.01	
2561	DIN54231	375.65		1.94	
2590	DIN54231	235.414		-0.09	
2591	DIN54231	108.375		-1.93	
2602	DIN54231	399.5		2.28	
2612		-----		-----	
2629	DIN54231	285		0.63	
2644	DIN54231	277.17		0.51	
2678	DIN54231	225.61		-0.23	
2737	DIN54231	275.64		0.49	
2743	DIN54231	72.90		-2.44	
2744	DIN54231	392		2.17	
2789		-----		-----	
2809	DIN54231	272		0.44	
2826	DIN54231	221		-0.30	
2827	In house	232.87		-0.13	
2912	DIN54231	339.057		1.41	
2959	DIN54231	234		-0.11	
2977		-----		-----	
3015	DIN54231	245.9		0.06	
3116	DIN54231	220.3		-0.31	

lab	method	value	mark	z(targ)	remarks
3118		-----		-----	
3153	DIN54231	228.4		-0.19	
3154	DIN54231	171.2		-1.02	
3172	DIN54231	170.11		-1.03	
3179	DIN54231	204.2		-0.54	
3197	DIN54231	228.7		-0.19	
3210	DIN54231	216		-0.37	
3237	DIN54231	250		0.12	
3246		269.1841		0.40	
	normality	suspect			
	n	74			
	outliers	2			
	mean (n)	241.6372			
	st.dev. (n)	56.62385	RSD = 23%		
	R(calc.)	158.5466			
	st.dev.(DIN54231:05)	69.15657			
	R(DIN54231:05)	193.6384			



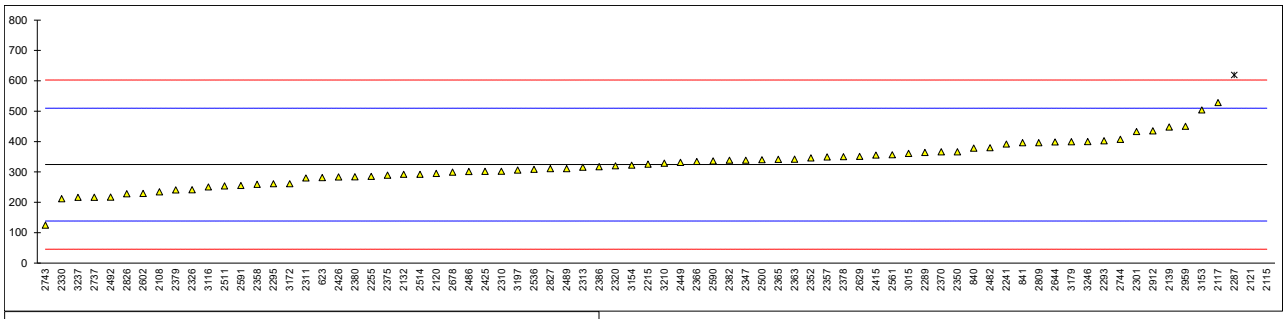


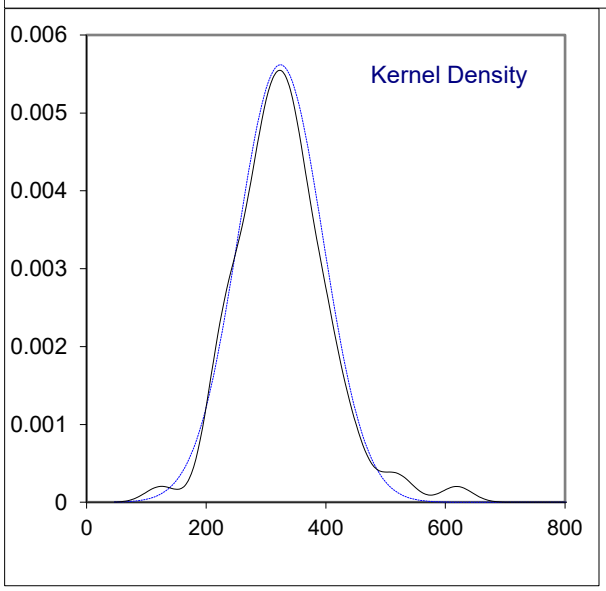
Determination of Disperse Yellow 3 (CAS No. 2832-40-8) in sample #23605; results in mg/kg

lab	method	value	mark	z(targ)	remarks
210		-----		-----	
362		-----		-----	
551		-----		-----	
623	DIN54231	281.24		-0.46	
840		378.2		0.58	
841	DIN54231	396		0.77	
2108	DIN54231	234.5		-0.97	
2115	In house	1843.3	R(0.01)	16.37	
2117	DIN54231	527.94		2.20	
2120	DIN54231	295		-0.31	
2121	In house	1378.9	C,R(0.01)	11.37	First reported 1616.9
2132	DIN54231	292.2		-0.34	
2139	DIN54231	447.68		1.33	
2215	DIN54231	325.18		0.01	
2241	DIN54231	391.673		0.73	
2255	DIN54231	285.0		-0.42	
2265		-----		-----	
2287	DIN54231	619.0	R(0.01)	3.18	
2289	DIN54231	364.3		0.43	
2293	DIN54231	402.32		0.84	
2295	DIN54231	261		-0.68	
2301	DIN54231	432.955		1.17	
2310	DIN54231	302		-0.24	
2311	DIN54231	280		-0.48	
2313	DIN54231	315.4		-0.09	
2320	DIN54231	320		-0.04	
2326	DIN54231	241.09		-0.90	
2330	DIN54231	211.57		-1.21	
2347	DIN54231	338.63		0.16	
2350	DIN54231	366.13		0.45	
2352	DIN54231	346.4		0.24	
2357	DIN54231	349.1		0.27	
2358	DIN54231	259.24		-0.70	
2363	DIN54231	342		0.19	
2365	DIN54231	341.2		0.18	
2366	DIN54231	334		0.11	
2370	DIN54231	366		0.45	
2375	DIN54231	289		-0.38	
2378	DIN54231	350.2		0.28	
2379	DIN54231	240.69		-0.90	
2380	DIN54231	284.0		-0.43	
2382	DIN54231	338.2		0.15	
2386	DIN54231	317.2	C	-0.08	Reported <15, mixed up both samples
2415	DIN54231	355.2		0.33	
2425	In house	301.78		-0.24	
2426	DIN54231	283.086		-0.44	
2449	DIN54231	331.35		0.08	
2482	DIN54231	379.6		0.60	
2486	DIN54231	301.32		-0.25	
2489	DIN54231	311		-0.14	
2492		217		-1.16	
2500	DIN54231	340.1		0.17	
2511	DIN54231	254		-0.76	
2514	In house	292.22		-0.34	
2536	DIN54231	308.32		-0.17	
2561	DIN54231	356.1		0.34	
2590	DIN54231	336.247		0.13	
2591	DIN54231	255.375		-0.74	
2602	DIN54231	229.2		-1.02	
2612		-----		-----	
2629	DIN54231	350.84		0.29	
2644	DIN54231	398.37		0.80	
2678	DIN54231	299.12		-0.27	
2737	DIN54231	216.65		-1.16	
2743	DIN54231	124.6	C	-2.15	First reported 58.30
2744	DIN54231	407		0.89	
2789		-----		-----	
2809	DIN54231	396		0.77	
2826	DIN54231	228		-1.04	
2827	In house	310.78		-0.14	
2912	DIN54231	435.138		1.20	
2959	DIN54231	450		1.36	
2977		-----		-----	
3015	DIN54231	360.6		0.39	
3116	DIN54231	250.3		-0.80	

lab	method	value	mark	z(targ)	remarks
3118		-----		-----	
3153	DIN54231	504.0		1.94	
3154	DIN54231	322.1		-0.02	
3172	DIN54231	261.16		-0.68	
3179	DIN54231	399.5		0.81	
3197	DIN54231	305.9		-0.20	
3210	DIN54231	329		0.05	
3237	DIN54231	216		-1.17	
3246		400.07		0.82	

	normality	OK	
	n	73	
	outliers	3	
	mean (n)	324.1680	
	st.dev. (n)	71.01506	RSD = 22%
	R(calc.)	198.8422	
	st.dev.(DIN54231:05)	92.77688	
	R(DIN54231:05)	259.7753	





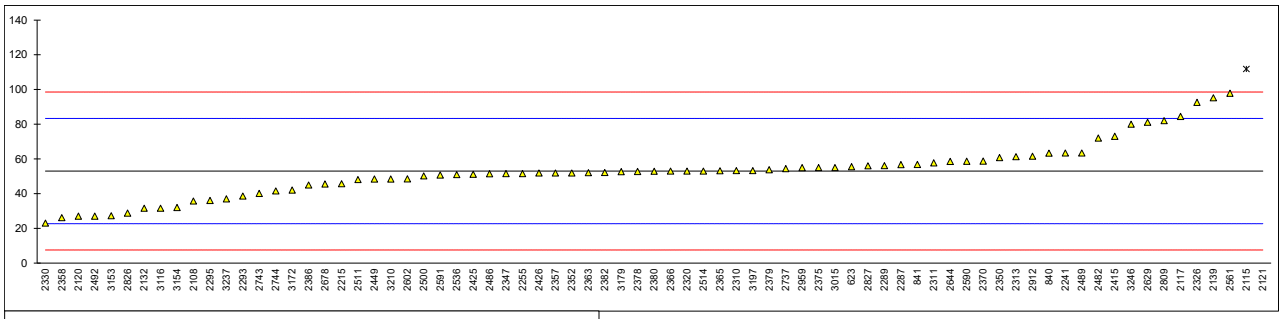
Determination of Basic Violet 3 with ≥ 0.1% Milcher's ketone or base (CAS No. 548-62-9) in sample #23606; results in mg/kg

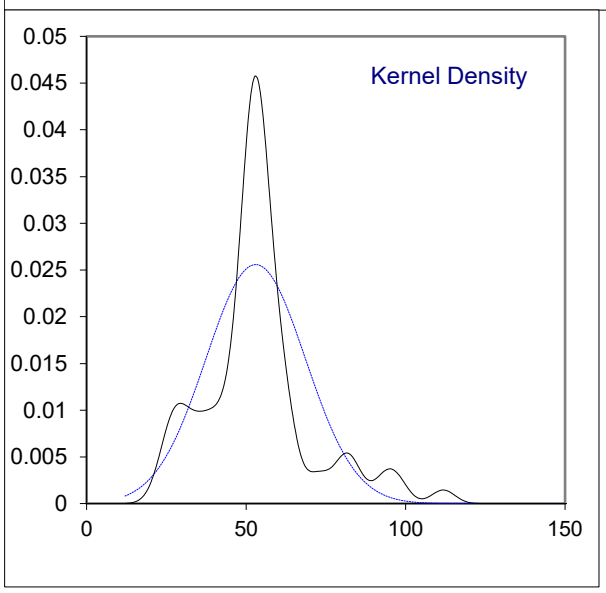
lab	method	value	mark	z(targ)	remarks
210		-----		-----	
362		-----		-----	
551		-----		-----	
623	DIN54231	55.51		0.17	
840		63.3		0.68	
841		56.77		0.25	
2108	DIN54231	35.7		-1.14	
2115	In house	111.8	R(0.05)	3.88	
2117	DIN54231	84.48		2.08	
2120	DIN54231	27		-1.71	
2121	In house	217.5	C,R(0.01)	10.85	First reported 221.70
2132	DIN54231	31.52		-1.42	
2139	DIN54231	95.2		2.78	
2215	DIN54231	45.67		-0.48	
2241	DIN54231	63.389		0.69	
2255	DIN54231	51.5		-0.10	
2265		-----		-----	
2287	DIN54231	56.70		0.25	
2289	DIN54231	56.1		0.21	
2293	DIN54231	38.6		-0.95	
2295	DIN54231	36		-1.12	
2301		-----		-----	
2310	DIN54231	53.2		0.01	
2311	DIN54231	57.7		0.31	
2313	DIN54231	61.22		0.54	
2320	DIN54231	53		0.00	
2326	DIN54231	92.57		2.61	
2330	DIN54231	23.00		-1.98	
2347	DIN54231	51.49		-0.10	
2350	DIN54231	60.75		0.51	
2352	DIN54231	51.9		-0.07	
2357	DIN54231	51.9		-0.07	
2358		26.13		-1.77	
2363	DIN54231	52		-0.06	
2365	DIN54231	53.1		0.01	
2366	DIN54231	53		0.00	
2370	DIN54231	58.7		0.38	
2375	DIN54231	55		0.13	
2378	DIN54231	52.7		-0.02	
2379	DIN54231	53.71		0.05	
2380	DIN54231	52.84		-0.01	
2382	DIN54231	52.1		-0.06	
2386	DIN54231	44.89	C	-0.53	Reported <15, mixed up both samples
2415	DIN54231	73.0		1.32	
2425	In house	51.1		-0.12	
2426	DIN54231	51.861		-0.07	
2449	DIN54231	48.36		-0.30	
2482	DIN54231	72.03		1.26	
2486	DIN54231	51.45		-0.10	
2489	DIN54231	63.4		0.69	
2492		27		-1.71	
2500	DIN54231	50.2		-0.18	
2511		48.023		-0.33	
2514	In house	53.0		0.00	
2536	DIN54231	50.93		-0.14	
2561	DIN54231	97.82		2.96	
2590	DIN54231	58.606		0.37	
2591	DIN54231	50.652		-0.15	
2602	DIN54231	48.44		-0.30	
2612		-----		-----	
2629	DIN54231	81.1		1.85	
2644	DIN54231	58.51		0.36	
2678	DIN54231	45.50		-0.49	
2737	DIN54231	54.36		0.09	
2743	DIN54231	40.10		-0.85	
2744	DIN54231	41.5		-0.76	
2789		-----		-----	
2809	DIN54231	82		1.91	
2826	DIN54231	28.8		-1.59	
2827	In house	55.99		0.20	
2912	DIN54231	61.537		0.56	
2959	DIN54231	54.88		0.13	
2977		-----		-----	
3015	DIN54231	55.0		0.13	
3116	DIN54231	31.56		-1.41	

lab	method	value	mark	z(targ)	remarks
3118		-----		-----	
3153	DIN54231	27.2		-1.70	
3154	DIN54231	32		-1.38	
3172		42.074		-0.72	
3179	DIN54231	52.6		-0.02	
3197	DIN54231	53.2		0.01	
3210	DIN54231	48.4		-0.30	
3237	DIN54231	37		-1.05	
3246		79.94		1.78	

	normality	suspect
	n	73
	outliers	2
	mean (n)	52.9789
	st.dev. (n)	15.60170
	R(calc.)	43.6848
	st.dev.(DIN54231:05)	15.16257
	R(DIN54231:05)	42.4552

RSD = 29%





APPENDIX 2 Other reported banned colorants

Abbreviations and details of allergenic colorants, see also OEKO-TEX® 100:

DB1	: Disperse Blue 1	CASno 2475-45-8	C.I.no 64 500
DB3	: Disperse Blue 3	CASno 2475-46-9	C.I.no 61 505
DB7	: Disperse Blue 7	CASno 3179-90-6	C.I.no 62 500
DB26	: Disperse Blue 26	CASno 3860-63-7	C.I.no 63 305
DB35	: Disperse Blue 35*	CASno 12222-75-2 (*)	
DB35a	: Disperse Blue 35a	CASno 56524-77-7	
DB35b	: Disperse Blue 35b	CASno 56524-76-6	
DB102	: Disperse Blue 102	CASno 12222-97-8	
DB106	: Disperse Blue 106	CASno 12223-01-7	
DB124	: Disperse Blue 124	CASno 61951-51-7	
DBr1	: Disperse Brown 1	CASno 23355-64-8	
DO1	: Disperse Orange 1	CASno 2581-69-3	C.I.no 11 080
DO3	: Disperse Orange 3	CASno 730-40-5	C.I.no 11 005
DO76	: Disperse Orange 76=37	CASno 13301-61-6	C.I.no 11 132
DR1	: Disperse Red 1	CASno 2872-52-8	C.I.no 11 110
DR11	: Disperse Red 11	CASno 2872-48-2	C.I.no 62 015
DR17	: Disperse Red 17	CASno 3179-89-3	C.I.no 11 210
DY1	: Disperse Yellow 1	CASno 119-15-3	C.I.no 10 345
DY3	: Disperse Yellow 3	CASno 2832-40-8	C.I.no 11 855
DY9	: Disperse Yellow 9	CASno 6373-73-5	C.I.no 10 37
DY39	: Disperse Yellow 39	CASno 12236-29-2	
DY49	: Disperse Yellow 49	CASno 54824-37-2	

* Disperse Blue 35 consists of a mixture of components, of which the monomethylated 1,8-diamino-4,5-dihydroxy-anthraquinone (CASno 56524-77-7) and the dimethylated 1,8-diamino-4,5-dihydroxy-anthraquinone (CASno 56524-76-6)
are responsible for the sensitizing potency of Disperse Blue 35, see also report iis09A04X of May 2009.

Abbreviations and details of carcinogenic colorants, see also OEKO-TEX® 100:

AR26	: Acid Red 26	CASno 3761-53-3	C.I. 16 150
BB26	: Basic Blue 26	CASno 2580-56-5	
BR9	: Basic Red 9	CASno 569-61-9	C.I. 42 500
BV3	: Basic Violet 3	CASno 548-62-9	
BV14	: Basic Violet 14	CASno 632-99-5	C.I. 42 510
DBl38	: Direct Black 38	CASno 1937-37-7	C.I. 30 235
DB6	: Direct Blue 6	CASno 2602-46-2	C.I. 22 610
DR28	: Direct Red 28	CASno 573-58-0	C.I. 22 120
DO11	: Disperse Orange 11	CASno 82-28-0	C.I. 60 700

Abbreviations and details of other banned colorants colorants, see also OEKO-TEX® 100:

DO149	: Disperse Orange 149	CASno 85136-74-9	
DY23	: Disperse Yellow 23	CASno 6250-23-3	C.I. 26 070
BG4o	: Basic Green 4 (oxalate)	CASno 2437-29-8	
BG4c	: Basic Green 4 (chloride)	CASno 569-64-2	
BG4f	: Basic Green 4 (free)	CASno 10309-95-2	
NB	: Navy Blue	EG-no.405-665-4	

Other reported Colorants in sample #23605; results in mg/kg

lab	DB1	DB3	DB7	DB26	DB35	DB35a	DB35b	DB102	DB106	DB124
210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
362	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
551	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
623	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
840	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
841	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2108	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2115	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2117	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2120	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2121	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2132	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2139	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2215	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2241	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2255	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2265	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2287	<15	<15	<15	<15	<15	-----	-----	<15	<15	<15
2289	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2293	0	0	0	0	0	0	0	0	0	0
2295	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2301	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2310	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2311	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2313	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2320	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2326	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2330	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2347	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2350	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00
2352	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2357	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2358	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2363	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2365	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2366	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2370	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2375	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2378	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2379	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2380	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2382	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0
2386	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2415	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2425	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2426	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2449	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2482	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5
2486	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2489	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2492	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2511	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2514	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2536	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected

lab	DB1	DB3	DB7	DB26	DB35	DB35a	DB35b	DB102	DB106	DB124
2561	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2590	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2591	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2602	not detected	not detected	-----	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2612	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2629	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg
2644	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2678	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2737	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2743	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2744	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2789	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2809	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2826	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2827	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2912	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2959	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2977	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3015	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
3116	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3118	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3153	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
3154	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3172	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
3179	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
3197	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3237	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3246	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected

Other reported Colorants in sample #23605; results in mg/kg -- continued --

lab	DBr1	DO1	DO3	DO76	DR11	DR17	DY1	DY9	DY39	DY49
210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
362	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
551	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
623	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
840	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
841	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2108	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2115	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2117	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2120	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2121	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2132	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2139	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2215	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2241	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2255	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2265	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2287	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2289	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2293	0	0	0	0	0	0	0	0	0	0
2295	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2301	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2310	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2311	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2313	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2320	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2326	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2330	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2347	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2350	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00
2352	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2357	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2358	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2363	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2365	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2366	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2370	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2375	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2378	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2379	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2380	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2382	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0
2386	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2415	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2425	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2426	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2449	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2482	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5
2486	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2489	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2492	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2511	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2514	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2536	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected

lab	DBr1	DO1	DO3	DO76	DR11	DR17	DY1	DY9	DY39	DY49
2561	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2590	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2591	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2602	not detected	not detected	not detected	not detected	not detected	not detected	-----	not detected	-----	-----
2612	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2629	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg
2644	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2678	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2737	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2743	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2744	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2789	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2809	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2826	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2827	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2912	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2959	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2977	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3015	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
3116	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3118	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3153	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
3154	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3172	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
3179	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
3197	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3237	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3246	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected

Other reported Colorants in sample #23605; results in mg/kg -- continued --

lab	AR26	BB26	BR9	BV3	BV 14	DBI 38	DB 6	DR 28	DO 11	DO 149
210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
362	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
551	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
623	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
840	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
841	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2108	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2115	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2117	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2120	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2121	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2132	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2139	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2215	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2241	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2255	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2265	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2287	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2289	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2293	0	0	0	0	0	0	0	0	0	0
2295	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2301	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2310	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2311	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2313	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2320	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2326	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2330	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2347	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2350	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00
2352	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2357	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2358	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2363	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2365	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2366	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2370	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2375	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2378	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2379	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2380	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2382	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0
2386	< 15	< 15	< 15	44.89	< 15	< 15	< 15	< 15	< 15	< 15
2415	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2425	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2426	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2449	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2482	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5
2486	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2489	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2492	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2511	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2514	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2536	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected

lab	AR26	BB26	BR9	BV3	BV 14	DBI 38	DB 6	DR 28	DO 11	DO 149
2561	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2590	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2591	-----	-----	-----	not detected	-----	-----	-----	-----	not detected	not detected
2602	-----	-----	-----	not detected	-----	-----	-----	-----	not detected	not detected
2612	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2629	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg	< 5 mg/kg
2644	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2678	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2737	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2743	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	64.00	Not detected	Not detected	Not detected
2744	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2789	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2809	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2826	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2827	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2912	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2959	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2977	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3015	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
3116	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3118	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3153	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
3154	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3172	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
3179	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
3197	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3237	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3246	-----	-----	-----	not detected	not detected	-----	-----	-----	not detected	not detected

Other reported Colorants in sample #23605; results in mg/kg -- continued --

lab	DY 23	BG 4o	BG 4c	BG 4f	NB
210	-----	-----	-----	-----	-----
362	-----	-----	-----	-----	-----
551	-----	-----	-----	-----	-----
623	not detected	not detected	not detected	not detected	not detected
840	not detected	not detected	not detected	not detected	not detected
841	<15	<15	<15	<15	<15
2108	-----	-----	-----	-----	-----
2115	-----	-----	-----	-----	-----
2117	not detected	not detected	not detected	not detected	not detected
2120	< 10	< 10	< 10	< 10	< 10
2121	-----	-----	-----	-----	-----
2132	<10	<10	<10	<10	<10
2139	-----	-----	-----	-----	-----
2215	not detected	not detected	not detected	not detected	not detected
2241	<10	-----	-----	-----	-----
2255	Not detected	Not detected	Not detected	Not detected	Not detected
2265	-----	-----	-----	-----	-----
2287	<15	<15	<15	<15	<15
2289	-----	-----	-----	-----	-----
2293	0	0	0	0	0
2295	-----	-----	-----	-----	-----
2301	-----	-----	-----	-----	-----
2310	not detected	not detected	not detected	not detected	not detected
2311	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2313	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2320	<15	<15	<15	<15	<15
2326	ND	ND	ND	ND	ND
2330	Not detected	Not detected	Not applicable	Not applicable	Not detected
2347	<15	<15	<15	<15	<15
2350	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00
2352	-----	-----	-----	-----	-----
2357	-----	-----	-----	-----	-----
2358	not detected	not detected	not detected	not detected	not detected
2363	<15	<15	<15	<15	<15
2365	＜15	＜15	＜15	＜15	＜15
2366	-----	-----	-----	-----	-----
2370	<5	<5	<5	<5	<5
2375	-----	-----	-----	-----	-----
2378	＜15	＜15	＜15	＜15	＜15
2379	Not detected	Not detected	Not detected	Not detected	Not detected
2380	<15	<15	<15	<15	<15
2382	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0
2386	< 15	< 15	< 15	< 15	< 15
2415	-----	-----	-----	-----	-----
2425	Not detected	Not detected	Not detected	Not detected	Not detected
2426	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2449	-----	-----	-----	-----	-----
2482	<7.5	<7.5	<7.5	<7.5	<7.5
2486	Not detected	Not detected	Not detected	Not detected	Not detected
2489	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2492	-----	-----	-----	-----	-----
2500	ND	ND	ND	ND	ND
2511	-----	-----	-----	-----	-----
2514	-----	-----	-----	-----	-----
2536	Not detected	Not detected	Not detected	Not detected	Not detected

lab	DY 23	BG 4o	BG 4c	BG 4f	NB
2561	-----	-----	-----	-----	-----
2590	-----	-----	-----	-----	-----
2591	not detected	-----	-----	-----	-----
2602	not detected	-----	-----	-----	-----
2612	-----	-----	-----	-----	-----
2629	< 5 mg/kg	-----	-----	-----	< 5 mg/kg
2644	-----	-----	-----	-----	-----
2678	Not detected	Not detected	Not detected	Not detected	Not detected
2737	-----	-----	-----	-----	-----
2743	Not detected	Not detected	Not detected	Not detected	Not detected
2744	not detected	not detected	not detected	not detected	not detected
2789	-----	-----	-----	-----	-----
2809	-----	-----	-----	-----	-----
2826	Not detected	Not detected	Not detected	Not detected	Not detected
2827	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2912	-----	-----	-----	-----	-----
2959	-----	-----	-----	-----	-----
2977	-----	-----	-----	-----	-----
3015	<15	<15	<15	<15	<15
3116	-----	-----	-----	-----	-----
3118	-----	-----	-----	-----	-----
3153	< 15	< 15	< 15	< 15	< 15
3154	-----	-----	-----	-----	-----
3172	< 1	-----	-----	< 1	< 1
3179	not detected	not detected	not detected	not detected	not detected
3197	<5	<5	<5	<5	<5
3210	-----	-----	-----	-----	-----
3237	-----	-----	-----	-----	-----
3246	not detected	-----	-----	-----	-----

Other reported Colorants in sample #23606; results in mg/kg

lab	DB1	DB3	DB7	DB26	DB35	DB35a	DB35b	DB102	DB106	DB124
210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
362	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
551	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
623	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
840	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
841	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2108	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2115	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2117	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2120	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2121	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2132	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2139	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2215	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2241	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2255	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2265	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2287	<15	<15	<15	<15	<15	-----	-----	<15	<15	<15
2289	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2293	0	0	0	0	0	0	0	0	0	0
2295	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2301	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2310	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2311	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2313	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2320	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2326	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2330	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2347	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2350	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00
2352	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2357	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2358	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2363	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2365	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2366	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2370	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2375	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2378	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2379	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2380	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2382	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0
2386	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2415	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2425	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2426	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2449	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2482	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5
2486	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2489	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2492	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2511	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2514	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2536	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected

lab	DB1	DB3	DB7	DB26	DB35	DB35a	DB35b	DB102	DB106	DB124
2561	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2590	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2591	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2602	not detected	not detected	-----	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2612	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2629	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg
2644	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2678	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2737	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2743	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2744	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2789	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2809	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2826	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2827	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2912	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2959	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2977	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3015	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
3116	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3118	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3153	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
3154	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3172	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
3179	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
3197	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3237	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3246	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected

Other reported Colorants in sample #23606; results in mg/kg -- continued --

lab	DBr1	DO1	DO3	DO76	DR1	DR11	DR17	DY1	DY3	DY9
210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
362	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
551	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
623	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
840	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
841	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2108	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2115	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2117	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2120	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2121	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2132	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2139	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2215	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2241	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2255	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2265	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2287	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2289	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2293	0	0	0	0	0	0	0	0	0	0
2295	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2301	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2310	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2311	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2313	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2320	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2326	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2330	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2347	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2350	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00
2352	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2357	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2358	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2363	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2365	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2366	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2370	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2375	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2378	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2379	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2380	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2382	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0
2386	< 15	< 15	< 15	< 15	211.5	< 15	< 15	< 15	317.2	< 15
2415	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2425	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2426	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2449	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2482	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5
2486	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2489	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2492	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2511	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2514	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2536	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected

lab	DBr1	DO1	DO3	DO76	DR1	DR11	DR17	DY1	DY3	DY9
2561	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2590	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2591	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2602	not detected	not detected	not detected	not detected	not detected	not detected	not detected	-----	not detected	not detected
2612	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2629	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg
2644	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2678	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2737	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2743	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2744	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2789	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2809	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2826	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2827	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2912	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2959	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2977	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3015	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
3116	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3118	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3153	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
3154	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3172	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
3179	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
3197	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3237	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3246	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected

Other reported Colorants in sample #23606; results in mg/kg -- continued --

lab	BB26	DY39	DY49	AR26	BR9	BV 14	DBI 38	DB 6	DR 28	DO 11
210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
362	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
551	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
623	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
840	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
841	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2108	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2115	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2117	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2120	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2121	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2132	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2139	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2215	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2241	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2255	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2265	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2287	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2289	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2293	0	0	0	0	0	0	0	0	0	0
2295	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2301	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2310	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2311	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2313	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2320	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2326	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2330	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2347	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2350	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00
2352	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2357	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2358	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2363	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2365	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2366	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2370	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2375	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2378	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2379	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2380	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2382	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0
2386	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2415	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2425	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2426	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2449	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2482	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5
2486	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2489	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2492	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2511	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2514	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2536	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected

lab	BB26	DY39	DY49	AR26	BR9	BV 14	DBI 38	DB 6	DR 28	DO 11
2561	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2590	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2591	-----	not detected	not detected	-----	-----	-----	-----	-----	-----	not detected
2602	-----	-----	-----	-----	-----	-----	-----	-----	-----	not detected
2612	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2629	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg	-----	<5 mg/kg	<5 mg/kg	<5 mg/kg	<5 mg/kg
2644	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2678	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2737	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2743	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2744	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
2789	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2809	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2826	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2827	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2912	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2959	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2977	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3015	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
3116	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3118	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3153	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
3154	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3172	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
3179	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected	not detected
3197	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3237	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3246	-----	not detected	not detected	-----	-----	not detected	-----	-----	-----	not detected

Other reported Colorants in sample #23606; results in mg/kg -- continued --

lab	DO 149	DY 23	BG 4o	BG 4c	BG 4f	NB
210	-----	-----	-----	-----	-----	-----
362	-----	-----	-----	-----	-----	-----
551	-----	-----	-----	-----	-----	-----
623	not detected	not detected	not detected	not detected	not detected	not detected
840	not detected	not detected	not detected	not detected	not detected	not detected
841	<15	<15	<15	<15	<15	<15
2108	-----	-----	-----	-----	-----	-----
2115	-----	-----	-----	-----	-----	-----
2117	not detected	not detected	not detected	not detected	not detected	not detected
2120	< 10	< 10	< 10	< 10	< 10	< 10
2121	-----	-----	-----	-----	-----	-----
2132	<10	<10	<10	<10	<10	<10
2139	-----	-----	-----	-----	-----	-----
2215	not detected	not detected	not detected	not detected	not detected	not detected
2241	<10	<10	-----	-----	-----	-----
2255	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2265	-----	-----	-----	-----	-----	-----
2287	<15	<15	<15	<15	<15	<15
2289	-----	-----	-----	-----	-----	-----
2293	0	0	0	0	0	0
2295	-----	-----	-----	-----	-----	-----
2301	95.1128	-----	-----	-----	-----	-----
2310	not detected	not detected	not detected	not detected	not detected	not detected
2311	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2313	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2320	<15	<15	<15	<15	<15	<15
2326	ND	ND	ND	ND	ND	ND
2330	Not detected	Not detected	Not detected	-----	-----	Not detected
2347	<15	<15	<15	<15	<15	<15
2350	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00	< 15.00
2352	-----	-----	-----	-----	-----	-----
2357	-----	-----	-----	-----	-----	-----
2358	not detected	not detected	not detected	not detected	not detected	not detected
2363	<15	<15	<15	<15	<15	<15
2365	＜15	＜15	＜15	＜15	＜15	＜15
2366	-----	-----	-----	-----	-----	-----
2370	<5	<5	<5	<5	<5	<5
2375	-----	-----	-----	-----	-----	-----
2378	＜15	＜15	＜15	＜15	＜15	＜15
2379	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2380	<15	<15	<15	<15	<15	<15
2382	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0	＜15.0
2386	< 15	< 15	< 15	< 15	< 15	< 15
2415	-----	-----	-----	-----	-----	-----
2425	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2426	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2449	-----	-----	-----	-----	-----	-----
2482	<7.5	<7.5	<7.5	<7.5	<7.5	<7.5
2486	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2489	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2492	-----	-----	-----	-----	-----	-----
2500	ND	ND	ND	ND	ND	ND
2511	-----	-----	-----	-----	-----	-----
2514	-----	-----	-----	-----	-----	-----
2536	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected

lab	DO 149	DY 23	BG 4o	BG 4c	BG 4f	NB
2561	-----	-----	-----	-----	-----	-----
2590	-----	-----	-----	-----	-----	-----
2591	not detected	not detected	-----	-----	-----	-----
2602	not detected	-----	-----	-----	-----	-----
2612	-----	-----	-----	-----	-----	-----
2629	<5 mg/kg	<5 mg/kg	-----	-----	-----	<5 mg/kg
2644	-----	-----	-----	-----	-----	-----
2678	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2737	-----	-----	-----	-----	-----	-----
2743	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2744	not detected	not detected	not detected	not detected	not detected	not detected
2789	-----	-----	-----	-----	-----	-----
2809	-----	-----	-----	-----	-----	-----
2826	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
2827	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
2912	-----	-----	-----	-----	-----	-----
2959	-----	-----	-----	-----	-----	-----
2977	-----	-----	-----	-----	-----	-----
3015	<15	<15	<15	<15	<15	<15
3116	-----	-----	-----	-----	-----	-----
3118	-----	-----	-----	-----	-----	-----
3153	< 15	< 15	< 15	< 15	< 15	< 15
3154	-----	-----	-----	-----	-----	-----
3172	< 1	< 1	-----	-----	< 1	< 1
3179	not detected	not detected	not detected	not detected	not detected	not detected
3197	<5	<5	<5	<5	<5	<5
3210	-----	-----	-----	-----	-----	-----
3237	-----	-----	-----	-----	-----	-----
3246	not detected	not detected	-----	-----	-----	-----

APPENDIX 3 Analytical details

lab	ISO/IEC17025 Accredited	Sample preparation	Sample intake used (grams)
210	---	---	
362	---	---	
551	---	---	
623	Yes	Further cut	1 gr
840	Yes	Further cut	0.5g
841	Yes	Further cut	1g
2108	Yes	Used as received	0,25 g per analysis
2115	No	Used as received	0.5g
2117	Yes	Used as received	0.5 g
2120	No	Used as received	0,5 g
2121	No	Used as received	1g
2132	No	Used as received	0.5g
2139	Yes	Used as received	0.5g
2215	Yes	Further cut	0.5g
2241	Yes	Further cut	0.5g
2255	Yes	Further cut	0.5
2265	---	---	
2287	No	Further cut	0.5g
2289	Yes	Further cut	0.5g
2293	Yes	Used as received	0.5 grams
2295	Yes	Further cut	0.95 grams
2301	No	Further cut	0.5 gram
2310	Yes	Further cut	1
2311	Yes	Further cut	0.5
2313	No	Further cut	1.0 g
2320	Yes	Further cut	1.0g
2326	Yes	Further cut	1 gm
2330	Yes	Further cut	1 gram
2347	Yes	Further cut	0.5g
2350	Yes	Further cut	1 g
2352	Yes	Further cut	0.5g
2357	---	---	
2358	Yes	Further cut	1.0g
2363	Yes	Used as received	1g
2365	Yes	Further grinded	0.5g
2366	No	Further cut	0.5g
2370	Yes	Further cut	0.5g
2375	Yes	Further cut	0,5 gram
2378	No	Further cut	0.5g
2379	Yes	Further cut	0.5 grams
2380	Yes	Further cut	1.0 g
2382	Yes	Further cut	1g
2386	Yes	Further cut	0.5 g
2415	Yes	Further cut	0.5 gram
2425	Yes	Further cut	0.5g
2426	Yes	Further cut	0.5g
2449	No	Further cut	1.0
2482	Yes	Used as received	0.5
2486	Yes	Further cut	0.5 g
2489	Yes	Further cut	0.5005g / 0.5010g
2492	Yes	Used as received	0.5g
2500	Yes	Used as received	0.5 grams
2511	Yes	Used as received	0.5
2514	Yes	Used as received	23605=0.3501 23606=0.2839
2536	Yes	Further cut	0.5008
2561	Yes	Used as received	1g
2590	Yes	Used as received	0.5g
2591	Yes	Further cut	0.5 grams
2602	Yes	Further cut	0.5 g
2612	---	---	
2629	Yes	Further cut	1.0 g
2644	Yes	Used as received	0.5
2678	No	Further cut	0.5g / 7.5 ml
2737	Yes	Further cut	0.5g
2743	Yes	Used as received	0.5
2744	Yes	Used as received	0,5
2789	---	---	
2809	Yes	Further cut	0.5
2826	Yes	Used as received	0.5 g
2827	Yes	Further cut	0.5gm
2912	No	Used as received	0.5 g
2959	Yes	Used as received	0.5g
2977	---	---	
3015	Yes	Used as received	0.5
3116	Yes	Used as received	0.5

lab	ISO/IEC17025 Accredited	Sample preparation	Sample intake used (grams)
3118	---	---	
3153	No	Further cut	0.5 gram
3154	Yes	Used as received	0,5
3172	Yes	---	
3179	Yes	Further cut	approx. 0,5 g
3197	Yes	Further cut	0,5
3210	Yes	Used as received	0.5 g
3237	Yes	Further cut	0,5
3246	Yes	Further cut	0.5G

APPENDIX 4

Number of participants per country

6 labs in BANGLADESH
1 lab in BRAZIL
1 lab in BULGARIA
1 lab in CAMBODIA
2 labs in FRANCE
9 labs in GERMANY
1 lab in GUATEMALA
6 labs in HONG KONG
5 labs in INDIA
3 labs in INDONESIA
7 labs in ITALY
1 lab in JAPAN
2 labs in KOREA, Republic of
1 lab in MOROCCO
15 labs in P.R. of CHINA
3 labs in PAKISTAN
1 lab in PORTUGAL
2 labs in SPAIN
1 lab in SRI LANKA
1 lab in TAIWAN
1 lab in THAILAND
2 labs in TUNISIA
5 labs in TURKEY
1 lab in UNITED KINGDOM
6 labs in VIETNAM

APPENDIX 5

Abbreviations

C	= final test result after checking of first reported suspect test result
D(0.01)	= outlier in Dixon's outlier test
D(0.05)	= straggler in Dixon's outlier test
G(0.01)	= outlier in Grubbs' outlier test
G(0.05)	= straggler in Grubbs' outlier test
DG(0.01)	= outlier in Double Grubbs' outlier test
DG(0.05)	= straggler in Double Grubbs' outlier test
R(0.01)	= outlier in Rosner's outlier test
R(0.05)	= straggler in Rosner's outlier test
W	= test result withdrawn on request of participant
ex	= test result excluded from statistical evaluation
n.a.	= not applicable
n.e.	= not evaluated
n.d.	= not detected
fr.	= first reported

Literature

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