Results of Proficiency Test
Colorants (Banned Dyes) in Textile
March 2021

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. Textiles are not allowed to contain more than 20 mg/kg of the dyes listed in the latest Oeko-tex Standard 100 edition 01/2021 and bluesign® 12/2020. The Oeko-tex Standard 100 also lists many carcinogenic dyes and other banned dyestuffs. With every update of the standard new banned dyes are added. The ban on dyes has become a widely publicized issue in the textile industry. Dyestuff manufacturers, processors and exporters are careful in the selection of the dyes. However, several dyestuffs that are skin sensitizers may still be in use for dyeing polyester and nylon.

Since 2005 the Institute for Interlaboratory Studies (iis) organizes a proficiency scheme for the analysis of Colorants (banned dyes) in textile every year. In 2016 the scope was extended with carcinogenic and other banned dyes. During the annual proficiency testing program 2020/2021 it was decided to continue the PT for the analysis of colorants (banned dyes) in textile.
In this interlaboratory study 84 laboratories in 25 different 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. An orange/brown polyester sample labelled #21555 and a blue/purple acrylic sample labelled #21556 which were both artificially fortified with different banned colorants.
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/brown polyester was selected which was dyed with Disperse Red 17 and Disperse Yellow 1, both allergenic colorants, by a third party. This batch was cut into small pieces. After homogenization the batch was divided over 120 subsamples in small bags of approximately 3 grams each and labelled #21555.
The homogeneity of the subsamples was checked by determination of Disperse Red 17 and Disperse Yellow 1 according to an in house test method on 8 stratified randomly selected subsamples.

	Disperse Red 17 in mg/kg	Disperse Yellow 1 in mg/kg
sample #21555-1	95.4	104.2
sample #21555-2	86.0	93.9
sample #21555-3	87.4	97.9
sample #21555-4	83.7	91.5
sample #21555-5	88.3	97.3
sample #21555-6	89.6	104.7
sample #21555-7	85.2	102.6
sample #21555-8	93.2	107.4

Table 1: homogeneity test results of subsamples #21555

From the above test results the repeatabilities were calculated and compared with 0.3 times the corresponding reproducibility of the reference test method in agreement with the procedure of ISO13528, Annex B2 in the next table.

	Disperse Red 17 in mg/kg	Disperse Yellow 1 in mg/kg
r (observed)	11.2	15.8
reference test method	DIN54231:05	DIN54231:05
0.3 x R (reference test method)	21.3	24.0

Table 2: evaluation of repeatabilities of subsamples #21555

The calculated repeatabilities are in agreement with 0.3 times the corresponding reproducibility of the reference test method. Therefore, homogeneity of the subsamples was assumed.

For the second sample a batch of blue/purple acrylic was selected which was dyed with Basic Violet 3, a carcinogenic colorant, by a third party. This batch was cut into small pieces. After homogenization the batch was divided over 120 subsamples in small bags of approximately 3 grams each and labelled #21556.
The homogeneity of the subsamples was checked by determination Basic Violet 3 according to an in house test method on 8 stratified randomly selected subsamples.

	Basic Violet 3 in mg/kg
sample #21556-1	46.7
sample #21556-2	45.5
sample #21556-3	42.8
sample #21556-4	49.5
sample #21556-5	47.2
sample #21556-6	49.6
sample #21556-7	46.8
sample #21556-8	51.0

Table 3: homogeneity test results of subsamples #21556

From the above test results the repeatability was calculated and compared with 0.3 times the reproducibility of the reference test method in agreement with the procedure of ISO13528, Annex B2 in the next table.

	Basic Violet 3 in mg/kg
r (observed)	7.3
reference test method	DIN54231:05
0.3 x R (reference test method)	11.4

Table 4: repeatability of subsamples #21556

The calculated repeatability is in agreement with 0.3 times the reproducibility of the reference test method. Therefore, homogeneity of the subsamples was assumed.

To each of the participating laboratories one sample labelled #21555 and one sample labelled #21556 was sent on March 3, 2021.

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 on sample #21555 and sample #21556, applying the analysis procedure that is routinely used in the laboratory. See list of colorants in appendix 2.
It was requested, to ensure homogeneity, to not use less than 0.5 grams per determination. It was also requested to report if the laboratory was accredited to determine the reported 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’ results, which are above the detection limit, because such 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 reanalysis). Additional or corrected test results are used for data analysis and original test results are placed under 'Remarks' in the test result tables in appendix 1. 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.

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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, 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 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 no problems were encountered with the dispatch of the samples. Not all laboratories were able to perform all analyzes requested. Two participants did not report any test results at all. Finally, 82 participants reported 236 numerical test results. Observed were 9 outlying test results, which is 3.8% of the numerical test results. In proficiency studies, outlier percentages of 3% - 7.5% are quite normal.

Not all original 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 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 in appendix 1 together with the original data. 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 #21555

Disperse Red 17 (CAS No. 3179-89-3): The determination was not problematic. Four statistical outliers were observed. The calculated reproducibility after rejection of the statistical outliers is in agreement with the estimated reproducibility derived from the test method DIN54231:05.

Disperse Yellow 1 (CAS No. 119-15-3): 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 the test method DIN54231:05.

The majority of 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 given in appendix 2.

Sample #21556

Basic Voilet 3 (CAS No. 548-62-9): 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 the test method DIN54231:05.

The majority of 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 given in appendix 2.

4.2 PERFORMANCE EVALUATION FOR THE GROUP OF LABORATORIES

A comparison has been made between the reproducibilities as declared by the reference test methods and the reproducibilities as found for the group of participating laboratories. The number of significant test results, the average, the calculated reproducibilities (2.8*standard deviation) and the target reproducibilities derived from the test method DIN54231:05 are compared in the next tables.

Component	unit	n	average	2.8 * sd	R(lit)
Disperse Red 17	mg/kg	77	213.6	176.9	171.2
Disperse Yellow 1	mg/kg	74	196.8	117.1	157.7

Table 5: reproducibilities of the colorants in textile sample #21555

Component	unit	n	average	2.8 * sd	R(lit)
Basic Violet 3	mg/kg	76	52.7	45.5	42.2

Table 6: reproducibility of the colorants in textile sample #21556

Without further statistical calculations it can be concluded the group of participating laboratories shows a good compliance with the standard requirements.
See also the discussion in paragraphs 4.1 and 5.

4.3 EVALUATION OF THE PROFICIENCY TEST OF MARCH 2021 WITH PREVIOUS PTS

	March 2021	March 2020	March 2019	March 2018	February 2017
Number of reporting laboratories	82	66	78	88	86
Number of test results	236	202	297	657	244
Number of statistical outliers	9	16	10	21	8
Percentage of statistical outliers	3.8%	7.9%	3.4%	3.2%	3.3%

Table 7: Comparison with previous proficiency tests

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

The uncertainties in the test results of the evaluated colorants in the iis21T05 PT are listed in below table and are compared with previous proficiency tests.

	March 2021	March 2020	March 2019	March 2018	2006 – 2017	target DIN54321
Disperse Blue 1	n.e.	n.e.	n.e.	n.e.	43%	27%
Disperse Blue 3	n.e.	n.e.	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.	24%	n.e.	n.e.	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.	n.e.	n.e.	35%	42 - 47%	27%
Disperse Orange 3	n.e.	n.e.	n.e.	n.e.	24 - 54%	27%
Disperse Orange 76/37	n.e.	33%	n.e.	33%	n.e	27%
Disperse Orange 149	n.e.	n.e.	21%	27%	n.e	27%
Disperse Red 1	n.e.	n.e.	33%	n.e.	36 - 63%	27%
Disperse Red 11	n.e.	n.e.	n.e.	n.e.	41 - 65%	27%
Disperse Red 17	30%	n.e.	n.e.	28%	28 - 33%	27%

	March 2021	March 2020	March 2019	March 2018	2006 – 2017	target DIN54321
Disperse Yellow 1	21%	n.e.	n.e.	n.e.	24%	27%
Disperse Yellow 3	n.e.	n.e.	34%	21%	28 - 30%	27%
Disperse Yellow 9	n.e.	n.e.	n.e.	21%	31%	27%
Disperse Yellow 23	n.e.	n.e.	13%	17%	n.e	27%
Disperse Yellow 49	n.e.	n.e.	n.e.	n.e.	54%	27%
Basic Red 9	n.e.	33%	n.e.	n.e.	n.e.	27%
Basic Violet 3	31%	n.e.	n.e.	n.e.	n.e.	27%
Basic Violet 14	n.e.	29%	n.e.	n.e.	n.e.	27%
Direct Black 38	n.e.	n.e.	n.e.	n.e.	32%	27%

Table 8: development of uncertainties over the last years

In comparison with previous PTS it is observed that the group performed in line with the previous determination of Disperse Red 17. The determination of Disperse Yellow 1 was slightly improved.

4.4 EVALUATION OF THE ANALYTICAL DETAILS

The test method DIN54231 is used by about 91% of the 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:
- 84% of the participants mentioned that they are accredited for the determination of banned dyes in textile.
- 5% used less than 0.5 grams
- 67% used 0.5 grams or less
- 22% used approximately 1 gram
- 6% used more than 1 gram

Due to the good performance of the group no effect has been observed in the differences of sample intake.

5 DISCUSSION

Almost all reporting participants were able to detect in Disperse Red 17 and Disperse Yellow 1 in sample #21555 and Basic Violet 3 in sample #21556. No other banned colorants were detected.
When the results of this interlaboratory study were compared to the Ecolabelling Standards and Requirements for Textiles in EU and with bluesign® BSSL (see table 9), 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® BSSL	<20 mg/kg	<20 mg/kg	<20 mg/kg
OEKO-TEX® standard	<20 mg/kg	<20 mg/kg	<20 mg/kg

Table 9: bluesign® BSSL and Ecolabelling Standards and Requirements for Textiles in EU

For sample #21555 almost all reporting laboratories would have rejected the sample for containing too much Disperse Red 17 and too much Disperse Yellow 1 for all categories. One participant did not detect Disperse Red 17 and another participant did not detect Disperse Yellow 1.
For sample #21556 almost all reporting laboratories would have rejected the sample for containing too much Basic Violet 3 for all categories. Four participants would have accepted the sample.

Sample #21555 was used earlier as sample #16525 in iis16A03 (2016). In table 10 a comparison is given over the proficiency tests.

	Sample #21555				Sample #16525			
	unit	n	average	R(calc)	unit	n	average	R(calc)
Disperse Red 17	mg/kg	77	214	177	mg/kg	78	214	169
Disperse Yellow 1	mg/kg	74	197	117	mg/kg	70	161	108

Table 10: comparison of sample #21555 with #16525

It is observed that the group performed in line with the previous determination of Disperse Red 17 in this PT. For Disperse Yellow 1 the group found a somewhat higher average for sample #21555 compare to #16525. Apparently, more laboratories could detect the Disperse Yellow 1 colorant better.

6 CONCLUSION

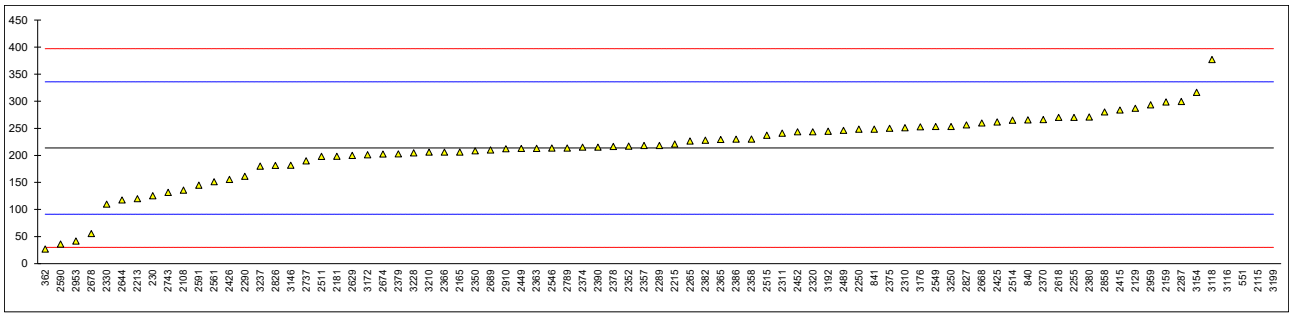
The variation in this interlaboratory study is clearly not caused by just one critical point in the analysis. Almost all participants reported to have used DIN 54231. However, the detection technique and the purity of the various calibration standards that are used may vary strongly. Each participating 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.

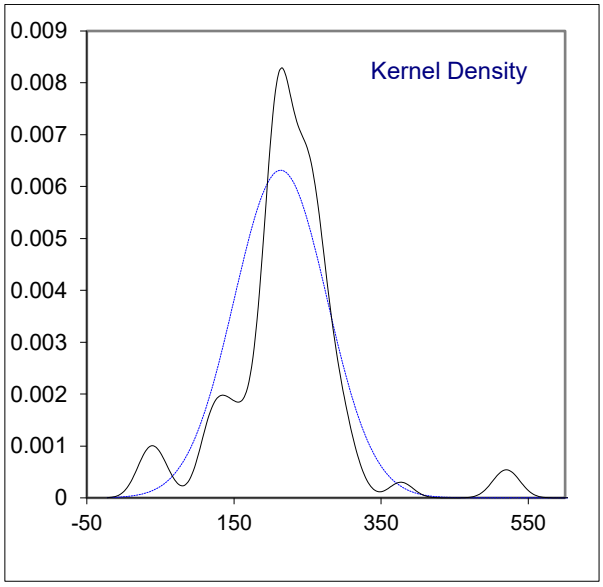
APPENDIX 1

Determination of Disperse Red 17 (CASno. 3179-89-3) in sample #21555; results in mg/kg

lab	method	value	mark	z(targ)	remarks
230	In house	125.22414		-1.45	
362	DIN54231	27.0		-3.05	
551	DIN54231	527.99	R(0.01)	5.14	
623		-----		-----	
840	DIN54231	265.4		0.85	
841	DIN54231	248.4		0.57	
2108	DIN54231	135.77		-1.27	
2115	In house	654.10	R(0.01)	7.20	
2129	DIN54231	286.80		1.20	
2159		298.76		1.39	
2165	DIN54231	206.2		-0.12	
2181	In house	198.39		-0.25	
2213	DIN54231	120		-1.53	
2215	DIN54231	220.95	C	0.12	First reported 520.13
2250	DIN54231	248.26		0.57	
2255	DIN54231	270.1		0.92	
2265	DIN54231	226.6		0.21	
2287	DIN54231	299.46		1.40	
2289	DIN54231	218		0.07	
2290	DIN54231	161.2		-0.86	
2293		-----		-----	
2310	DIN54231	251		0.61	
2311	DIN54231	240.959		0.45	
2320	DIN54231	243.531		0.49	
2330	DIN54231	109.72		-1.70	
2350	DIN54231	208.4		-0.09	
2352	DIN54231	217		0.06	
2357	DIN54231	218		0.07	
2358	DIN54231	230		0.27	
2363	DIN54231	213		-0.01	
2365	DIN54231	229.4		0.26	
2366	DIN54231	206		-0.12	
2370	DIN54231	266		0.86	
2374	DIN54231	215.12		0.02	
2375	DIN54231	250		0.59	
2378	DIN54231	216.5		0.05	
2379	DIN54231	202.480		-0.18	
2380	DIN54231	270.80		0.93	
2382	DIN54231	228.0		0.23	
2386	DIN54231	229.7		0.26	
2390	DIN54231	215.12		0.02	
2415	DIN54231	283.73		1.15	
2425	DIN54231	261.5		0.78	
2426	DIN54231	155.57		-0.95	
2449		212.8		-0.01	
2452	In house	243.474		0.49	
2459	DIN54231	ND		-----	Possibly a false negative test result? No D.L. reported
2489	DIN54231	246		0.53	
2511	DIN54231	197.90		-0.26	
2514	In house	264.84		0.84	
2515	DIN54231	237.2	C	0.39	First reported 517.2
2546	DIN54231	213.44		0.00	
2549	DIN54231	253.1		0.65	
2561	DIN54231	151.3		-1.02	
2590	DIN54231	36.003	C	-2.91	First reported 31.235
2591	DIN54231	145.01		-1.12	
2618	DIN54231	270.00		0.92	
2629	DIN54231	199.9		-0.22	
2644	DIN54231	117.52		-1.57	
2668	DIN54231	259.65		0.75	
2674	DIN54231	202.4		-0.18	
2678	DIN54231	55.35		-2.59	
2689	DIN54231	210		-0.06	
2737	DIN54231	189.92		-0.39	
2743	DIN54231	131.60095		-1.34	
2789	DIN54231	213.52		0.00	
2826	DIN54231	181.3		-0.53	
2827	DIN54231	256.11		0.69	
2858	DIN54231	280.10		1.09	
2910	DIN54231	212		-0.03	
2953	DIN54231	41.69		-2.81	
2959	DIN54231	293.3		1.30	
3116	DIN54231	512.8	R(0.01)	4.89	
3118	DIN54231	377.10		2.67	
3146	DIN54231	181.63		-0.52	

lab	method	value	mark	z(targ)	remarks
3154	DIN54231	316.34		1.68	
3172	DIN54231	200.9		-0.21	
3176	DIN54231	252.587		0.64	
3192	DIN54231	244.6220		0.51	
3199	DIN54231	847	C,R(0.01)	10.36	First reported 967
3210	DIN54231	205.79		-0.13	
3228	DIN54231	204.4		-0.15	
3237	DIN54231	180		-0.55	
3250	DIN54231	253.14		0.65	
	normality	suspect			
	n	77			
	outliers	4			
	mean (n)	213.636			
	st.dev. (n)	63.1628	RSD= 30 %		
	R(calc.)	176.856			
	st.dev.(DIN54231:05)	61.1427			
	R(DIN54231:05)	171.199			



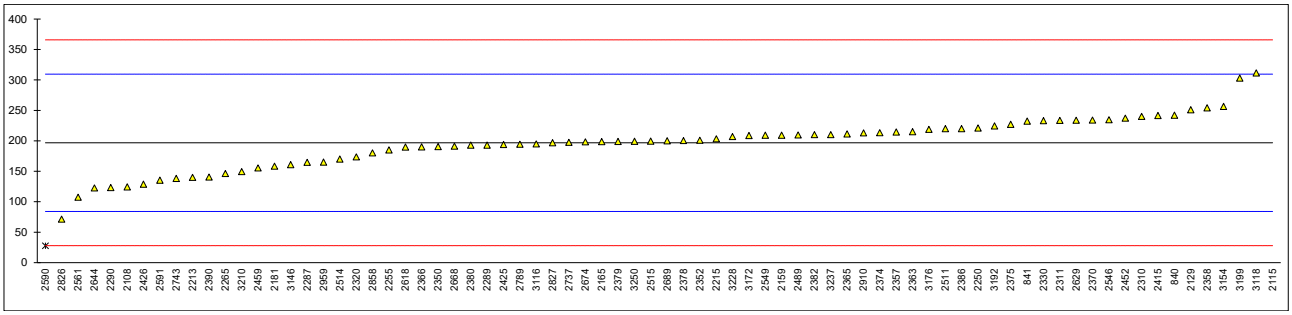


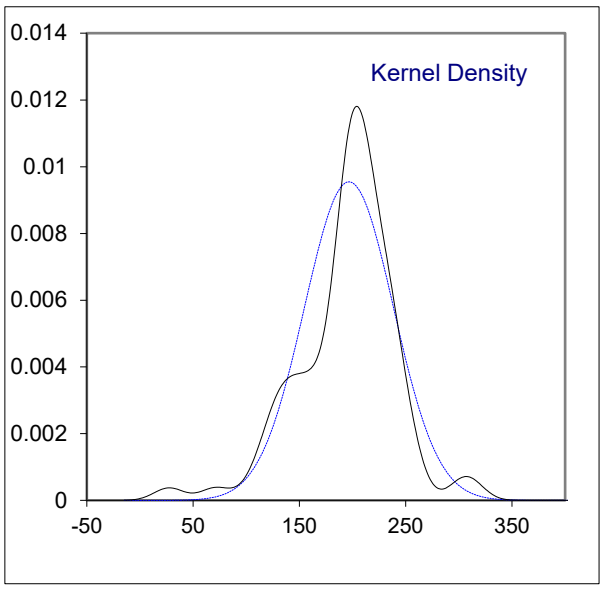
Determination of Disperse Yellow 1 (CASno. 119-15-3) in sample #21555; results in mg/kg

lab	method	value	mark	z(targ)	remarks
230		-----		-----	
362		-----		-----	
551		-----		-----	
623		-----		-----	
840	DIN54231	242.1		0.80	
841	DIN54231	232.4		0.63	
2108	DIN54231	124.13		-1.29	
2115	In house	578.81	R(0.01)	6.78	
2129	DIN54231	250.92		0.96	
2159		209.21		0.22	
2165	DIN54231	198.6		0.03	
2181	In house	158.27		-0.68	
2213	DIN54231	140		-1.01	
2215	DIN54231	203.37		0.12	
2250	DIN54231	220.85		0.43	
2255	DIN54231	185.0		-0.21	
2265	DIN54231	146.15		-0.90	
2287	DIN54231	164.70		-0.57	
2289	DIN54231	193		-0.07	
2290	DIN54231	123.3		-1.30	
2293		-----		-----	
2310	DIN54231	240		0.77	
2311	DIN54231	233.468		0.65	
2320	DIN54231	173.60	C	-0.41	First reported “not detected”
2330	DIN54231	232.94		0.64	
2350	DIN54231	190.6		-0.11	
2352	DIN54231	201		0.07	
2357	DIN54231	214.4		0.31	
2358	DIN54231	254		1.02	
2363	DIN54231	215		0.32	
2365	DIN54231	211.3		0.26	
2366	DIN54231	190		-0.12	
2370	DIN54231	234		0.66	
2374	DIN54231	213.23		0.29	
2375	DIN54231	227		0.54	
2378	DIN54231	200.3		0.06	
2379	DIN54231	198.888		0.04	
2380	DIN54231	192.90		-0.07	
2382	DIN54231	210.0		0.23	
2386	DIN54231	220.1		0.41	
2390	DIN54231	140.43		-1.00	
2415	DIN54231	241.58		0.80	
2425	DIN54231	193.9		-0.05	
2426	DIN54231	128.84		-1.21	
2449		-----		-----	
2452	In house	237.213		0.72	
2459	DIN54231	155.427		-0.73	
2489	DIN54231	209.5		0.23	
2511	DIN54231	220.01		0.41	
2514	In house	170.04		-0.47	
2515	DIN54231	199.4		0.05	
2546	DIN54231	234.46		0.67	
2549	DIN54231	209.2		0.22	
2561	DIN54231	107.2		-1.59	
2590	DIN54231	27.540	C,R(0.05)	-3.01	First reported 26.665
2591	DIN54231	135.26		-1.09	
2618	DIN54231	189.75		-0.12	
2629	DIN54231	233.7		0.66	
2644	DIN54231	122.44		-1.32	
2668	DIN54231	191.17		-0.10	
2674	DIN54231	198.2		0.03	
2678	DIN54231	not detected		-----	Possibly a false negative test result? No D.L. reported
2689	DIN54231	200		0.06	
2737	DIN54231	197.62		0.01	
2743	DIN54231	138.31185		-1.04	
2789	DIN54231	194.34		-0.04	
2826	DIN54231	71.34		-2.23	
2827	DIN54231	196.73		0.00	
2858	DIN54231	180.10		-0.30	
2910	DIN54231	213		0.29	
2953		-----		-----	
2959	DIN54231	165.0		-0.56	
3116	DIN54231	194.8		-0.04	
3118	DIN54231	311.42		2.04	
3146	DIN54231	160.75		-0.64	

lab	method	value	mark	z(targ)	remarks
3154	DIN54231	256.5	C	1.06	First reported 312.84
3172	DIN54231	208.6		0.21	
3176	DIN54231	218.700		0.39	
3192	DIN54231	224.2644		0.49	
3199	DIN54231	303	C	1.89	First reported 340
3210	DIN54231	149.41		-0.84	
3228	DIN54231	206.9		0.18	
3237	DIN54231	210		0.23	
3250	DIN54231	199.23		0.04	

	normality	suspect
	n	74
	outliers	2
	mean (n)	196.790
	st.dev. (n)	41.8119 RSD = 21%
	R(calc.)	117.073
	st.dev.(DIN54231:05)	56.3213
	R(DIN54231:05)	157.700



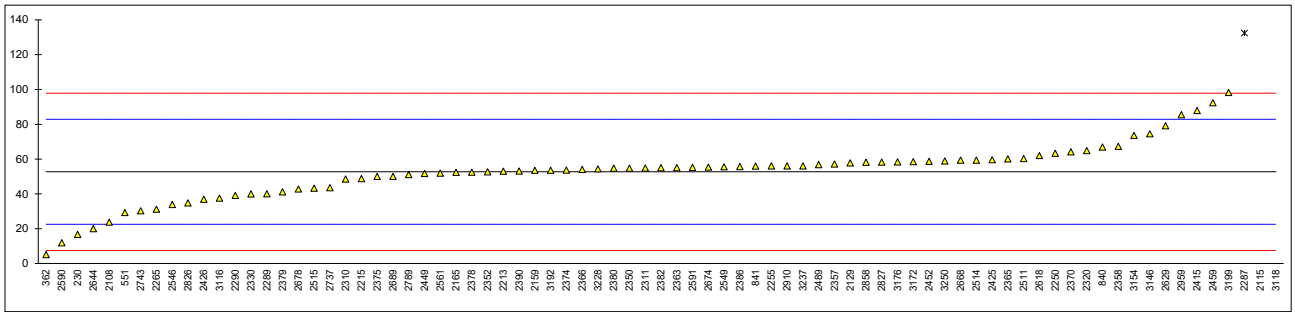


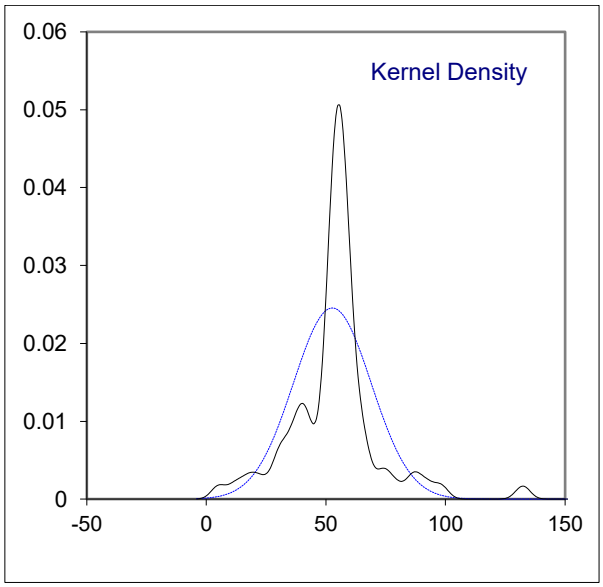
Determination of Basic Violet 3 (CASno. 548-62-9) in sample #21556; results in mg/kg

lab	method	value	mark	z(targ)	remarks
230	In house	16.64343		-2.39	
362	DIN54231	5.10		-3.16	
551	DIN54231	29.20		-1.56	
623		-----		-----	
840	DIN54231	66.8		0.94	
841	DIN54231	55.9		0.21	
2108		23.65		-1.93	
2115	In house	199.70	R(0.01)	9.75	
2129	DIN54231	57.788		0.34	
2159		53.47		0.05	
2165	DIN54231	52.3		-0.03	
2181		-----		-----	
2213	DIN54231	53		0.02	
2215	DIN54231	48.74		-0.26	
2250	DIN54231	63.26		0.70	
2255	DIN54231	56.0		0.22	
2265	DIN54231	31.1		-1.43	
2287	DIN54231	132.35	R(0.01)	5.28	
2289	DIN54231	40		-0.84	
2290	DIN54231	39.1		-0.90	
2293		-----		-----	
2310	DIN54231	48.5		-0.28	
2311	DIN54231	54.801		0.14	
2320	DIN54231	64.804		0.80	
2330	DIN54231	39.96		-0.84	
2350	DIN54231	54.77		0.14	
2352	DIN54231	52.6		-0.01	
2357	DIN54231	57.1		0.29	
2358	DIN54231	67.29		0.97	
2363	DIN54231	55		0.15	
2365	DIN54231	60.1		0.49	
2366	DIN54231	54		0.09	
2370	DIN54231	64.1		0.76	
2374	DIN54231	53.68		0.07	
2375	DIN54231	50		-0.18	
2378	DIN54231	52.4		-0.02	
2379	DIN54231	41.143		-0.77	
2380	DIN54231	54.70		0.13	
2382	DIN54231	55.0		0.15	
2386	DIN54231	55.64		0.20	
2390	DIN54231	53.06		0.02	
2415	DIN54231	87.83		2.33	
2425	DIN54231	59.6		0.46	
2426	DIN54231	36.89		-1.05	
2449		51.68		-0.07	
2452	In house	58.593		0.39	
2459	DIN54231	92.319		2.63	
2489	DIN54231	56.8		0.27	
2511	DIN54231	60.20		0.50	
2514	In house	59.35		0.44	
2515	DIN54231	43.22		-0.63	
2546	DIN54231	33.83		-1.25	
2549	DIN54231	55.5		0.19	
2561	DIN54231	51.88		-0.05	
2590	DIN54231	11.875		-2.71	
2591	DIN54231	55.16		0.16	
2618	DIN54231	61.95		0.61	
2629	DIN54231	79.1		1.75	
2644	DIN54231	19.96		-2.17	
2668	DIN54231	59.29		0.44	
2674	DIN54231	55.3		0.17	
2678	DIN54231	42.69		-0.66	
2689	DIN54231	50		-0.18	
2737	DIN54231	43.47		-0.61	
2743	DIN54231	30.217263	C	-1.49	First reported 106.86185
2789	DIN54231	51.01		-0.11	
2826	DIN54231	34.8	C	-1.19	First reported 119.1
2827	DIN54231	58.23		0.37	
2858	DIN54231	58.10		0.36	
2910	DIN54231	56		0.22	
2953		-----		-----	
2959	DIN54231	85.5		2.18	
3116	DIN54231	37.50		-1.01	
3118	DIN54231	218.00	R(0.01)	10.96	
3146	DIN54231	74.44		1.44	

lab	method	value	mark	z(targ)	remarks
3154	DIN54231	73.5	C	1.38	First reported 102.91
3172	DIN54231	58.5		0.39	
3176	DIN54231	58.311		0.37	
3192	DIN54231	53.5439		0.06	
3199	DIN54231	98.2	C	3.02	First reported 127
3210	DIN54231	<50		-----	
3228	DIN54231	54.3		0.11	
3237	DIN54231	56		0.22	
3250	DIN54231	58.9		0.41	

	normality	suspect
	n	76
	outliers	3
	mean (n)	52.687
	st.dev. (n)	16.2670 RSD = 31%
	R(calc.)	45.548
	st.dev.(DIN54231:05)	15.0791
	R(DIN54231:05)	42.222





APPENDIX 2 Other reported banned colorants

Abbreviations and details of allergenic colorants, see also Oekotex 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 Oekotex 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 Oekotex 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 allergenic Colorants in sample #21555; results in mg/kg

lab	DB 1	DB 3	DB 7	DB 26	DB 35	DB 35a	DB 35b	DB102	DB 106	DB 124	DBr 1	DO 1
230	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
362	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1.80	-----
551	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
623	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
840	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
841	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2108	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2115	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2129	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2159	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2165	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2181	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2213	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2215	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2250	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2255	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2265	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2287	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2289	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2290	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2293	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2310	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2311	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2320	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2330	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2350	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2352	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2357	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2358	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
2363	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2365	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2366	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2370	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2374	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2375	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2378	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2379	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2380	<15	<15	<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	<15.0	<15.0
2386	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2390	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2415	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2425	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2426	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2449	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2452	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim
2459	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2489	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2511	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2514	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2515	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2546	<5	<5	<5	<5	<5	-----	-----	<5	<5	<5	<5	<5
2549	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2561	<15	<15	<15	<15	<15	-----	-----	<15	<15	<15	<15	<15
2590	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2591	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2618	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2629	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
2644	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2668	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2674	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2678	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2689	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2737	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2743	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2789	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2826	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2827	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2858	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d
2910	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2953	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2959	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3116	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3118	<5	<5	<5	<5	<5	-----	-----	<5	<5	<5	<5	<5
3146	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.

lab	DB 1	DB 3	DB 7	DB 26	DB 35	DB 35a	DB 35b	DB102	DB 106	DB 124	DBr 1	DO 1
3154	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3172	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
3176	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3192	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3199	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
3210	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
3228	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
3237	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3250	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Other reported allergenic Colorants in sample #21555; results in mg/kg -- continued --

lab	DO3	DO76	DR 1	DR 11	DY 3	DY 9	DY 39	DY 49	AR 26	BB 26	BR 9	BV 3
230	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
362	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
551	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
623	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
840	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
841	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2108	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2115	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2129	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2159	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2165	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2181	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2213	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2215	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2250	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2255	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2265	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2287	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2289	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2290	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2293	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2310	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2311	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2320	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2330	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2350	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2352	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2357	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2358	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
2363	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2365	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2366	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2370	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2374	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2375	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2378	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2379	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2380	<15	<15	<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	<15.0	<15.0
2386	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2390	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2415	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2425	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2426	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2449	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2452	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim
2459	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2489	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2511	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2514	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2515	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2546	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2549	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2561	< 15	< 15	< 15	< 15	< 15	39.3	< 15	< 15	< 15	< 15	< 15	< 15
2590	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2591	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	-----	-----	not det.	not det.
2618	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2629	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
2644	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2668	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2674	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2678	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.

lab	DO3	DO76	DR 1	DR 11	DY 3	DY 9	DY 39	DY 49	AR 26	BB 26	BR 9	BV 3
2689	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	n.analyz	not det.	not det.
2737	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2743	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2789	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2826	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2827	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2858	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d
2910	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2953	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2959	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3116	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3118	<5	<5	<5	<5	<5	<5	<5	<5	<5	-----	<5	<5
3146	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
3154	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3172	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
3176	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3192	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3199	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	n. tested	n. tested	not det.	not det.
3210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3228	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
3237	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3250	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Other reported allergenic Colorants in sample #21555; results in mg/kg -- continued --

lab	BV 14	DBI 38	DB 6	DR 28	DO 11	DO 149	DY 23	BG 4o	BG 4c	BG 4f	NB
230	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
362	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
551	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
623	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
840	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
841	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2108	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2115	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2129	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2159	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2165	not det.	not det.	not det.	not det.	not det.	not det.	not det.	-----	-----	-----	-----
2181	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2213	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2215	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2250	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2255	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2265	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2287	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2289	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2290	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2293	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2310	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2311	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2320	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2330	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	n.appl	Not det.	Not det.
2350	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2352	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2357	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2358	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
2363	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2365	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2366	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2370	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2374	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2375	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2378	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2379	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2380	<15	<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	< 15.0
2386	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2390	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2415	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2425	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2426	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2449	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2452	<D.Lim	-----	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	-----	-----
2459	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2489	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2511	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

lab	BV 14	DBI 38	DB 6	DR 28	DO 11	DO 149	DY 23	BG 4o	BG 4c	BG 4f	NB
2514	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2515	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2546	<5	<5	<5	-----	<5	<5	<5	<5	<5	<5	<5
2549	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2561	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2590	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2591	not det.	-----	-----	-----	not det.	not det.	not det.	-----	-----	-----	-----
2618	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2629	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
2644	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2668	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2674	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	-----
2678	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2689	not det.	not det.	not det.	not det.	not det.	not det.	not det.	n.analyz	n.analyz	n.analyz	n.analyz
2737	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2743	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2789	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2826	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2827	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2858	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d
2910	not det.	not det.	not det.	not det.	not det.	not det.	not det.	-----	-----	-----	-----
2953	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2959	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3116	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3118	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3146	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
3154	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3172	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
3176	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3192	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3199	not det.	n. tested	n. tested	n. tested	not det.	not det.	not det.	n. tested	n. tested	n. tested	n. tested
3210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3228	not det.	not det.	not det.	not det.	not det.	not det.	not det.	-----	-----	-----	-----
3237	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3250	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Other reported allergenic Colorants in sample #21556; results in mg/kg

lab	DB 1	DB 3	DB 7	DB 26	BD 35	DB 35a	DB 35b	DB 102	DB 106	DB 124	DBr 1	DO 1
230	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
362	-----	7.20	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
551	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
623	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
840	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
841	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2108	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2115	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2129	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2159	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2165	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2181	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2213	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2215	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2250	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2255	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2265	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2287	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2289	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2290	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2293	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2310	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2311	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2320	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2330	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2350	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2352	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2357	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2358	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
2363	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2365	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2366	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2370	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2374	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2375	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2378	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2379	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2380	<15	<15	<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	< 15.0	< 15.0
2386	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2390	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2415	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2425	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2426	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2449	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2452	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim
2459	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2489	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2511	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2514	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2515	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2546	<5	<5	<5	<5	<5	-----	-----	<5	<5	<5	<5	<5
2549	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2561	< 15	< 15	< 15	< 15	< 15	-----	-----	< 15	< 15	< 15	< 15	< 15
2590	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2591	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2618	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2629	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2644	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2668	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2674	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2678	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2689	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2737	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2743	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2789	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2826	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2827	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2858	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d
2910	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2953	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2959	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3116	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3118	<5	<5	261.11	<5	<5	-----	-----	<5	<5	<5	<5	<5
3146	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.

lab	DB 1	DB 3	DB 7	DB 26	BD 35	DB 35a	DB 35b	DB 102	DB 106	DB 124	DBr 1	DO 1
3154	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3172	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
3176	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3192	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3199	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
3210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3228	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
3237	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3250	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Other reported allergenic Colorants in sample #21556; results in mg/kg -- continued --

lab	DO 3	DO 76	DR 1	DR 11	DR 17	DY 1	DY 3	DY 9	DY 39	DY 49	AR 26	BB 26
230	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
362	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
551	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
623	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
840	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
841	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2108	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2115	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2129	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2159	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2165	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2181	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2213	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2215	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2250	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2255	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2265	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2287	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2289	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2290	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2293	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2310	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2311	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2320	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	289.840	Not Det.	Not Det.	Not Det.
2330	Not det.	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det
2350	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2352	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2357	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2358	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
2363	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2365	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2366	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2370	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2374	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2375	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2378	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2379	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det
2380	<15	<15	<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	< 15.0	< 15.0
2386	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2390	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2415	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2425	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det
2426	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det	Not det
2449	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2452	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim
2459	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	-----	-----
2489	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2511	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2514	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2515	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2546	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2549	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2561	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2590	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2591	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	-----	-----
2618	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2629	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2644	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2668	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2674	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2678	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.

lab	DO 3	DO 76	DR 1	DR 11	DR 17	DY 1	DY 3	DY 9	DY 39	DY 49	AR 26	BB 26
2689	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	n.analyz
2737	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2743	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2789	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	208.38
2826	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2827	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2858	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d
2910	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2953	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2959	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3116	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3118	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	-----
3146	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
3154	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3172	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
3176	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3192	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3199	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	n. tested	n. tested
3210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3228	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
3237	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3250	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Other reported allergenic Colorants in sample #21556; results in mg/kg -- continued --

lab	BR 9	BV 14	DBI 38	DB 6	DR 28	DO 11	DO 149	DY 23	BG 4o	BG 4c	BG 4f	NB
230	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
362	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
551	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
623	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
840	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
841	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2108	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2115	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2129	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2159	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2165	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	-----	-----	-----	-----
2181	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2213	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2215	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2250	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2255	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2265	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2287	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2289	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2290	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2293	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2310	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2311	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2320	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2330	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	n.appl	Not det.	Not det.
2350	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2352	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2357	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2358	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
2363	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2365	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15	＜15
2366	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2370	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2374	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2375	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2378	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2379	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2380	<15	<15	<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	< 15.0	< 15.0
2386	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
2390	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.
2415	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2425	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2426	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
2449	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2452	<D.Lim	<D.Lim	-----	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	<D.Lim	-----	-----
2459	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2489	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2511	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

lab	BR 9	BV 14	DBI 38	DB 6	DR 28	DO 11	DO 149	DY 23	BG 4o	BG 4c	BG 4f	NB
2514	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2515	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2546	<5	<5	<5	<5	-----	<5	<5	<5	<5	<5	<5	<5
2549	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2561	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15
2590	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2591	not det.	not det.	-----	-----	-----	not det.	not det.	not det.	-----	-----	-----	-----
2618	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2629	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2644	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2668	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2674	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	-----
2678	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	24.00
2689	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	n.analyz	n.analyz	n.analyz	n.analyz
2737	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2743	-----	4.5984	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2789	-----	1746.85	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2826	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2827	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.	Not Det.
2858	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d	n.d
2910	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	-----	-----	-----	-----
2953	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2959	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3116	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3118	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
3146	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.	Not det.
3154	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3172	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
3176	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3192	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3199	not det.	not det.	n. tested	n. tested	n. tested	not det.	not det.	not det.	n. tested	n. tested	n. tested	n. tested
3210	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3228	not det.	not det.	not det.	not det.	not det.	not det.	not det.	not det.	-----	-----	-----	-----
3237	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3250	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

APPENDIX 3 Analytical details

lab	ISO/IEC17025 Accredited	Sample intake used (grams)	Sample preparation
230	Yes	0.5000 g	Further cut
362	Yes	1.0 g	Used as received
551	No	1g	Further cut
623	---		---
840	Yes	0.5g	Further cut
841	Yes	1 grams	Further cut
2108	Yes	0,5 g	Further cut
2115	No	0.5 g	Used as received
2129	Yes	1,0	Used as received
2159	Yes	0,5 g	Further cut
2165	Yes	2g	Further cut
2181	Yes	0.5 gramms of each tested sample	Further cut
2213	---		---
2215	No	0.5g	Further cut
2250	Yes	0,5	Used as received
2255	Yes	0.5	Further cut
2265	Yes	0,5g	Further cut
2287	No	0.5g	Further cut
2289	Yes	0.5g	Further cut
2290	Yes		---
2293	---		---
2310	Yes	1	Further cut
2311	Yes	0.5	Further cut
2320	Yes	0.5g	Further cut
2330	Yes	1 gram	Further cut
2350	Yes	1g	Further cut
2352	Yes	1g	Further cut
2357	---		---
2358	Yes	1.0g	Further cut
2363	Yes	1g	Further cut
2365	Yes	0.5g	Further cut
2366	No	0.5g	Further cut
2370	Yes	0.5 g	Further cut
2374	Yes	0.5g	Further cut
2375	Yes	0.50 g	Further cut
2378	Yes	0.5g	Used as received
2379	Yes	1 gram	Further cut
2380	Yes	1.0 g	Further cut
2382	Yes	1g	Further cut
2386	Yes	0,5g	Used as received
2390	Yes	1.0 g	Further cut
2415	Yes	0.3	Further cut
2425	Yes	0.5 g	Further cut
2426	Yes	0.5 gram	Further cut
2449	Yes	1.0 gram	Further cut
2452	No	0.5	Used as received
2459	Yes	1.0g	Further cut 2*2 mm
2489	Yes	21555: 0.5013g/21556: 0.5035 g	Further cut
2511	Yes	3 gram	Used as received
2514	Yes	21555=0.244 21556=0.359	Further cut
2515	Yes	About 0.5gram	Further cut
2546	Yes	0,5 g	Further cut
2549	Yes	05 grams	Used as received
2561	Yes	0.5-0.6	Further cut
2590	Yes	0.5g	Further cut
2591	Yes	0.5 grams	Further cut
2618	Yes	0.5 gm	Used as received
2629	Yes	0.5g	Further cut
2644	---	0.5	---
2668	Yes	0.5 gms	Further cut
2674	No	2g	Used as received
2678	No	0.5g	Further cut
2689	Yes	0.5g	Further cut
2737	Yes	0.5 grams	Used as received
2743	Yes	0.75g	Used as received
2789	Yes	0.5	Used as received
2826	Yes	0.5 g	Used as received
2827	Yes	0.5g	Further cut
2858	Yes	0.5067 gm	Further cut
2910	Yes	1.5g	Further cut
2953	No	0.5g	Further cut
2959	Yes	0.5g	Used as received
3116	Yes	0.5g	Used as received
3118	Yes	0.5	Further cut
3146	Yes	21555 0,5089 g 21556 0,4899 g	Used as received

lab	ISO/IEC17025 Accredited	Sample intake used (grams)	Sample preparation
3154	Yes	0,4g / 10 ml solvent	Used as received
3172	Yes	0.25	Further cut
3176	Yes	0,5	Used as received
3192	Yes	0,5 g	Used as received
3199	No	0.5g.	Further cut
3210	Yes	0.5g	Used as received
3228	Yes	2	Used as received
3237	Yes	0,5	Further cut
3250	Yes	0.5 g	Used as received

APPENDIX 4

Number of participants per country

6 labs in BANGLADESH
1 lab in BRAZIL
1 lab in BULGARIA
2 labs in CAMBODIA
1 lab in FRANCE
8 labs in GERMANY
1 lab in GUATEMALA
3 labs in HONG KONG
7 labs in INDIA
2 labs in INDONESIA
7 labs in ITALY
1 lab in JAPAN
17 labs in P.R. of CHINA
4 labs in PAKISTAN
1 lab in POLAND
1 lab in SOUTH KOREA
2 labs in SPAIN
1 lab in SRI LANKA
1 lab in TAIWAN
1 lab in THAILAND
3 labs in TUNISIA
4 labs in TURKEY
1 lab in USA
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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