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QN1

Applicant: BEECHFIELD BRANDS LTD Test Date : Mar 11, 2019 - Mar 29, 2019

Address: UNIT 3 WARTH INDUSTRIAL PARK, WARTH ROAD, **Received Date:** Mar 11, 2019

BURY, LANCASHIRE, UNITED KINGDOM, BL9 9NB

**Contact Person:** SAM BIBBY

Sample Description: **QN Fabrics** 

**Country of Origin: Buyer Name:** Sam Bibby PAKISTAN

**Export To:** Supplier Name: QN

Style/Item No.: BG641, BG642, BG646, BG673, BG683, QD23, Tested age grade:

QD26, QD27, W101, W101C, W104, W107, W108, W110, W115, W118, W125, W180, W187, W185, W201, W210, W216, W225, W260, W261, W266, W530, W540, W552, W558, W572, W680, W684, W685, W701, W801, W810, W820, W821, W812, W814,

W825, W830, W840

<u>Test Item</u>	Conclusion
Detection of the Use of Banned Azo Colourants [REACH Annex XVII]	PASS
Free and Hydrolised Formaldehyde [BS EN ISO 14184-1:2011]	PASS
197 Substances of Very High Concern (SVHC) Screening Test	PASS
Fibre Content [EU Regulation No. 1007:2011 With Amendment From EU No.286/2012]	PASS

PO No.:

### Remark:

- The results relate only to the samples tested. 1.
- "NC"=No Comment, "NA"=Not Applicable, " \* " See the attached test results details

For and on behalf of UL VS Hong Kong Limited

Kenneth Ho - Testing Manager Hardlines & Toys

/ay

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### **Sample Information:**

Sample	Product
001	QN Fabrics
002	Fuchsia fabric (FUS 4oz cotton) (F1)
003	Black fabric (BLK 4oz cotton) (F1)
004	Beige fabric (NAT 4oz cotton) (F1)
005	Pastel Pink fabric (PTP 5oz cotton) (F2)
006	Black fabric (BLK 5oz cotton) (F2)
007	Beige fabric (NAT 5oz cotton) (F2)
008	Black fabric (BLK 5oz Organic cotton) (F3)
009	Kelly Green fabric (KEL 5oz Organic cotton) (F3)
010	Beige fabric (NAT 5oz Organic cotton) (F3)
011	Black fabric (BLK 8oz cotton canvas) (F4)
012	Beige fabric (NAT 8oz cotton canvas) (F4)
013	Black fabric (BLK 10oz Organic cotton canvas) (F5)
014	French Navy fabric (FNA 10oz Organic cotton canvas) (F5)
015	Beige fabric (NAT 10oz Organic cotton canvas) (F5)
016	Black fabric (BLK 12 oz cotton canvas) (F6)
017	Light grey fabric (LGR 12 oz cotton canvas) (F6)
018	Beige fabric (NAT 12 oz cotton canvas) (F6)
019	Fuchsia printed white fabric (12oz Bleached RFD cotton canvas) (F7)
020	Dark Navy printed white fabric (12oz cotton canvas, stripe print) (F8)
021	Pastel Blue fabric (PTB 12oz brushed Organic cotton canvas) (F9)
022	Black fabric (BLK 12oz brushed Organic cotton canvas) (F9)
023	Beige fabric (NAT 12oz brushed Organic cotton canvas) (F9)
024	Black fabric (BLK 12 oz brushed cotton canvas) (F10)
025	French Navy fabric (FNA 12 oz brushed cotton canvas) (F10)
026	Beige fabric (NAT 12 oz brushed cotton canvas) (F10)
027	Black fabric (BLK 6oz cotton) (F11)
028	French Navy fabric (FNA 6oz cotton) (F11)
029	Beige fabric (NAT 6oz cotton) (F11)
030	Black fabric (BLK 3oz Organic cotton) (F12)
031	Beige fabric (NAT 3oz Organic cotton) (F12)
032	Black fabric (BLK 6oz Organic cotton) (F13)

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033	French Navy fabric (FNA 6oz Organic cotton) (F13)
034	Beige fabric (NAT 6oz Organic cotton) (F13)
035	Denim Blue fabric (Cotton Denim) (F14)
036	White fabric (Bleached RFD 12 oz cotton canvas) (F6)
037	002+003+004+005+006+007+008+009+010
038	011+012+013+014+015+016+017+018+036
039	019+020+021+022+023+024+025+026
040	027+028+029+030+031+032+033+034+035
041	4oz cotton
042	5oz cotton
043	5oz Organic cotton
044	8oz cotton canvas
045	10oz Organic cotton canvas
046	12oz cotton canvas
047	12oz Bleached RFD cotton canvas
048	12oz cotton canvas
049	12oz brushed Organic cotton canvas
050	12oz brushed cotton canvas
051	6oz cotton
052	3oz Organic cotton
053	6oz Organic cotton
054	Cotton Denim

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## (01) Detection of the Use of Banned Azo Colourants [REACH Annex XVII]

Banned azo colourants per European Law (Regulation (EC) No. 1907/2006 on REACH Annex XVII item no. 43 and appendix 8 as amended by commission regulation (EC) no. 552/2009) are such colourants that may form one of the following amines by splitting up one or more azo groups.

Test method according to the official test procedures EN 14362-1:2017 for textile, EN ISO 17234-1:2015 for leather materials. The presence of 4-aminoazobenzene is determined by EN 14362-3:2017 for textile, EN ISO 17234-2:2011 for leather materials. Removal of fat by n-hexane (in case of leather), treatment with citric buffer, reductive cleavage with sodium dithionite, extraction with ether, detection by GC/MS and/or HPLC/DAD. (Detection limit: 5 mg/kg)

BENZIDINE (CAS No. 92-87-5) 3,3'-DIMETHYLBENZIDINE (CAS No. 119-93-7)

4-AMINODIPHENYL (CAS No. 92-67-1) 4,4'-METHYLENEDI-O-TOLUIDINE (CAS No. 838-88-0)

4-CHLORO-O-TOLUIDINE (CAS No. 95-69-2) P-CRESIDINE (CAS No. 120-71-8)

2-NAPHTHYLAMINE (CAS No. 91-59-8) 4,4'-METHYLENE-BIS-(2-CHLOROANILINE) (CAS No. 101-14-4)

 O-AMINOAZOTOLUENE (CAS No. 97-56-3)
 4,4'-OXYDIANILINE (CAS No. 101-80-4)

 5-NITRO-O-TOLUIDINE (CAS No. 99-55-8)
 4,4'-THIODIANILINE (CAS No. 139-65-1)

4-CHLOROANILINE (CAS No. 106-47-8) O-TOLUIDINE (CAS No. 95-53-4)

4-METHOXY-M-PHENYLENEDIAMINE (CAS No. 615-05-4) 2,4,5-TRIMETHYLANILINE (CAS No. 137-17-7)

4,4'-DIAMINODIPHENYLMETHANE (CAS No. 101-77-9)
4-METHYL-M-PHENYLENEDIAMINE (CAS No. 95-80-7)
3,3'-DICHLOROBENZIDINE (CAS No. 91-94-1)
O-ANISIDINE (CAS No. 90-04-0)

3,3'-DIMETHOXYBENZIDINE (CAS No. 119-90-4) 4-AMINOAZOBENZENE (CAS No. 60-09-3)

Sample	Test Method	<u>Result</u> (Amine Detected)	Comments
002+003+005	EN 14362-1:2017 (With & Without Extraction)	Not Detected	PASS
006+008+009	EN 14362-1:2017 (With & Without Extraction)	Not Detected	PASS
011+013+014	EN 14362-1:2017 (With & Without Extraction)	Not Detected	PASS
016+017+019	EN 14362-1:2017 (With & Without Extraction)	Not Detected	PASS
020+021+022	EN 14362-1:2017 (With & Without Extraction)	Not Detected	PASS
024+025+027	EN 14362-1:2017 (With & Without Extraction)	Not Detected	PASS
028+030+032	EN 14362-1:2017 (With & Without Extraction)	Not Detected	PASS
033+035	EN 14362-1:2017 (With & Without Extraction)	Not Detected	PASS

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Note: Limit = 30 mg/kg (Not Applicable for combine test)

### **Test Conclusions:**

(1) The submitted samples (002+003+005), (006+008+009), (011+013+014), (016+017+019), (020+021+022), (024+025+027), (028+030+032) and (033+035) did not contain the 22 forbidden amines according to Regulation (EC) No. 1907/2006 on REACH Annex XVII Item No. 43 and Appendix 8 as amended by Commission Regulation (EC) No. 522/2009 and Commission Regulation (EU) No.126/2013.

### Interpretation of test results:

- 1. In the case of levels per amine component<= 30 mg/kg: not detected. According to the analysis as carried out, azo colourants banned under the Ordinance on Commodities were not detected in the articles submitted.
- 2. In the case of levels per amine component > 30 mg/kg. The analysis result suggests that the article submitted has been manufactured or treated by using azo colourants banned under the Ordinance on Commodities.
- 3. In case of a result between 25 and 35 mg/kg. We remark that due to the error range of the method, these measurement values represent a border line case.

### (02) Free and Hydrolised Formaldehyde [BS EN ISO 14184-1:2011]

Detection Limit: 16 mg/kg

Sample	Result(mg/kg)	Requirement(mg/kg)	
002+003+005	ND	Max. 75	PASS
006+008+009	ND	Max. 75	PASS
011+013+014	ND	Max. 75	PASS
016+017+019	ND	Max. 75	PASS
020+021+022	ND	Max. 75	PASS
024+025+027	ND	Max. 75	PASS
028+030+032	ND	Max. 75	PASS
033+035+036	ND	Max. 75	PASS

<sup>&</sup>quot;<" means less than ;">" means greater than ; "mg/kg" means milligrams per kilogram

"ND" means "Not detected"

Remarks:

1. Detection limit: 16 mg/kg

2. Calibration range: 15 to 600 (mg/kg)

3. Sample size: 1 gram

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# (03) 197 Substances of Very High Concern (SVHC) Screening Test

Acid digestion followed by ICP-AES analysis, Solvent extraction followed by GC/MS, GC/ECD, and LC/MS/MS, Headspace sampling followed by GC/MS

Result: PASS

### 002+003+004+005+006+007+008+009+010

No.	Substance Name	CAS Number	Concentration (%)	Limit (%)
1	Dibutyl phthalate (DBP)	84-74-2	< 0.01	0.1
2	Diisobutyl phthlalate (DIBP)	84-69-5	< 0.01	0.1
3	Benzyl butyl phthalate (BBP)	85-68-7	< 0.01	0.1
4	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	< 0.01	0.1
5	5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)	81-15-2	< 0.01	0.1
6	4,4'-Diaminodiphenyl methane (MDA)	101-77-9	< 0.01	0.1
7	Hexabromocyclododecane (HBCD) and all major diastereoisomers identified; 1,2,5,6,9,10-hexabromocyclodecane; Hexabromocyclododecane; alpha-hexabromocyclododecane; beta-hexabromocyclododecane; gamma-hexabromocyclododecane	3194- 55-6, 25637-99-4; 134237-50-6; 134237-51-7; 134237-52-8	< 0.01	0.1
8	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	< 0.01	0.1
9	Anthracene	120-12-7	< 0.01	0.1
10	Acrylamide	79-06-1	< 0.01	0.1
11	2,4-Dinitrotoluene	121-14-2	< 0.01	0.1
12	Tris(2-chloroethyl) phosphate	115-96-8	< 0.01	0.1
13	Anthracene oil	90640-80-5	< 0.01	0.1
14	Anthracene oil, anthracene paste, distillation light	91995-17-4	< 0.01	0.1
15	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	< 0.01	0.1
16	Anthracene oil, anthracene-low	90640-82-7	< 0.01	0.1
17	Anthracene oil, anthracene paste	90640-81-6	< 0.01	0.1
18	Coal tar pitch, high temperature	65996-93-2	< 0.01	0.1
19	Trichloroethylene	79-01-6	< 0.01	0.1

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No.	Substance Name		CAS Number	Concentration (%)	Limit (%)
20	2-Methoxyethanol		109-86-4	< 0.01	0.1
21	2-Ethoxyethanol		110-80-5	< 0.01	0.1
22	2-Ethoxyethyl aceta		111-15-9	< 0.01	0.1
23	1,2-Benzenedicarbo	oxylic acid, di-C7-11-branched ers (DHNUP)	68515-42-4	< 0.01	0.1
24	Hydrazine		302-01-2; 7803-57-8	< 0.01	0.1
25	1-Methyl-2-pyrrolide	one (NMP)	872-50-4	< 0.01	0.1
26	1,2,3-Trichloroprop		96-18-4	< 0.01	0.1
27	1,2-Benzenedicarbo and linear alkyl este	oxylic acid, di-C6-8-branched ers, C7-rich (DIHP)	71888-89-6	< 0.01	0.1
28	2,2'-dichloro-4,4'-m	ethylenedianiline (MOCA)	101-14-4	< 0.01	0.1
29	N,N-dimethylacetar		127-19-5	< 0.01	0.1
30	Bis(2-methoxyethyl	) ether	111-96-6	< 0.01	0.1
31	1,2-Dichloroethane		107-06-2	< 0.01	0.1
32	2-Methoxyaniline o-Anisidine		90-04-0	< 0.01	0.1
33	Bis(2-methoxyethyl	) phthalate	117-82-8	< 0.01	0.1
34		omeric reaction products with	25214-70-4	< 0.01	0.1
35	1,2-bis(2-methoxye triglyme)	thoxy)ethane (TEGDME;	112-49-2	< 0.01	0.1
36	1,2-dimethoxyethar ether (EGDME)	ne; ethylene glycol dimethyl	110-71-4	< 0.01	0.1
37	Formamide		75-12-7	< 0.01	0.1
38	trione (TGIC)	ylmethyl)-1,3,5-triazinane-2,4,6-	2451-62-9	< 0.01	0.1
39	1,3,5-tris[(2S and 2 triazine-2,4,6-(1H,3	R)-2,3-epoxypropyl]-1,3,5- H,5H)-trione (β-TGIC)	59653-74-6	< 0.01	0.1
40	Bis(pentabromophe (decabromodiphen)	enyl) ether /l ether) (DecaBDE)	1163-19-5	< 0.01	0.1
41			85-42-7; 14166-21-3; 13149-00-3	< 0.01	0.1
42		Hexahydromethylphthalic anhydride	25550-51-0	< 0.01	0.1
	Hexahydromethyl phthalic	Hexahydro-4-methylphthalic anhydride	19438-60-9	< 0.01	0.1
	anhydride	Hexahydro-1-methylphthalic anhydride	48122-14-1	< 0.01	0.1
		Hexahydro-3-methylphthalic anhydride	57110-29-9	< 0.01	0.1

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No.	Substance Name		CAS Number	Concentration (%)	Limit (%)
43	1,2-Benzenedicarl branched and line	boxylic acid, dipentylester, ar	84777-06-0	< 0.01	0.1
44	Diisopentyl phthal		605-50-5	< 0.01	0.1
45	N-pentyl-isopentyl		776297-69-9	< 0.01	0.1
46	1,2-Diethoxyethan		629-14-1	< 0.01	0.1
47	N,N-dimethylforma		68-12-2	< 0.01	0.1
48	Furan		110-00-9	< 0.01	0.1
49	Methyloxirane (Pro	opylene oxide)	75-56-9	< 0.01	0.1
50	Diethyl sulphate		64-67-5	< 0.01	0.1
51	Dimethyl sulphate		77-78-1	< 0.01	0.1
52	4,4'-methylenedi-c	o-toluidine	838-88-0	< 0.01	0.1
53	4,4'-oxydianiline a	nd its salts	101-80-4	< 0.01	0.1
54	4-Aminoazobenze	ne	60-09-3	< 0.01	0.1
55	4-methyl-m-phenylenediamine (2,4-toluene-diamine)		95-80-7	< 0.01	0.1
56	6-methoxy-m-toluidine (p-cresidine)		120-71-8	< 0.01	0.1
57	Biphenyl-4-ylamin		92-67-1	< 0.01	0.1
58	o-aminoazotoluen	e	97-56-3	< 0.01	0.1
59	o-Toluidine; 2-Ami	inotoluene	95-53-4	< 0.01	0.1
60	N-methylacetamid	е	79-16-3	< 0.01	0.1
61	1-bromopropane;	n-propyl bromide	106-94-5	< 0.01	0.1
62	Dipentyl phthalate		131-18-0	< 0.01	0.1
63	Dihexyl phthalate	(DnHP)	84-75-3	< 0.01	0.1
64	Trixylyl phosphate		25155-23-1	< 0.01	0.1
65	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear (DIHP + DnHP)		68515-50-4	< 0.01	0.1
66	1,2- benzenedicarbo xylic acid, di-C6-	1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters (C6, C7, C8, C9, C10)	68515-51-5	< 0.01	0.1
	10-alkyl esters or mixed decyl and hexyl and octyl diesters	1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters (C6, C8 and C10)	68648-93-1	< 0.01	0.1
67	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2]		-	< 0.01	0.1
68	1,3-propanesulton	е	1120-71-4	< 0.01	0.1
69	Nitrobenzene		96-95-3	< 0.01	0.1
70	Benzo[a]pyrene		50-32-8	< 0.01	0.1
71	Chrysene		218-01-9	< 0.01	0.1
72	Benz[a]anthracene	е	56-55-3	< 0.01	0.1

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No.	Substance Name	CAS Number	Concentration	Limit
	1/1/10/01/1	4.40.00.0	(%)	(%)
73	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	< 0.01	0.1
74	Phenolphthalein	77-09-8	< 0.01	0.1
75	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	< 0.01	0.1
76	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	< 0.01	0.1
77	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1- ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9	< 0.01	0.1
78	[4-[[4-anilino-1-naphthyl][4- (dimethylamino)phenyl]methylene]cyclohexa-2,5- dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	2580-56-5	< 0.01	0.1
79	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	< 0.01	0.1
80	Pentacosafluorotridecanoic acid	72629-94-8	< 0.01	0.1
31	Tricosafluorododecanoic acid	307-55-1	< 0.01	0.1
32	Henicosafluoroundecanoic acid	2058-94-8	< 0.01	0.1
83	Heptacosafluorotetradecanoic acid	376-06-7	< 0.01	0.1
84	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	_	< 0.01	0.1
85	4-Nonylphenol, branched and linear	-	< 0.01	0.1
86	Methoxyacetic acid	625-45-6	< 0.01	0.1
87	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	< 0.01	0.1
88	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	< 0.01	0.1
89	Diazene-1,2-dicarboxamide (C,C'- azodi(formamide)) (ADCA)	123-77-3	< 0.01	0.1
90	4,4'-bis(dimethylamino)-4"-(methylamino)trityl alcohol	561-41-1	< 0.01	0.1
91	4-Nonylphenol, branched and linear, ethoxylated	-	< 0.01	0.1
92	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	< 0.01	0.1
93	Pentadecafluorooctanoic acid (PFOA)	335-67-1	< 0.01	0.1
94	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	< 0.01	0.1
95	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	< 0.01	0.1
96	Imidazolidine-2-thione; (2-imidazoline-2-thiol); Ethylenethiourea	96-45-7	< 0.01	0.1

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No.	Substance Name	CAS Number	Concentration (%)	Limit (%)
97	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	< 0.01	0.1
98	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	< 0.01	0.1
99	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1 < 0.01		0.1
100	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	< 0.01	0.1
101	Perfluorononan-1-oic-acid and its sodium and ammonium salts;	oic-acid and its sodium and 375-95-1 21049-39-8 < 0.01 4149-60-4		0.1
102	4,4'-isopropylidenediphenol (bisphenol A)	80-05-7	< 0.01	0.1
103	nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	335-76-2 3108-42-7 3830-45-3	08-42-7 < 0.01 0.1	
104	4-heptylphenol, branched and linear 1987-50-4 6465-71-0 6465-74-3 6863-24-7 < 0.01		< 0.01	0.1
105	4-tert-pentylphenol / p-(1,1-dimethylpropyl)phenol	80-46-6	< 0.01	0.1
106	Perfluorohexane-1-sulphonic acid and its salts (PFHxS)	355-46-4	< 0.01	0.1
107	7 Dechlorane plus 13560-89-9 135821-74-8 < 0.01 135821-03-3		< 0.01	0.1
108	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)	-	< 0.01 0.1	
109	Bis(tributyltin)oxide (TBTO)	56-35-9	< 0.01	0.1
110	Dibutyltin dichloride (DBTC)	683-18-1	< 0.01	0.1
111	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	< 0.01	0.1
112	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	-	< 0.01	0.1
113	Cobalt dichloride	7646-79-9	< 0.01	0.1
114	Diarsenic pentaoxide	1303-28-2	< 0.01	0.1
115	Diarsenic trioxide	1327-53-3	< 0.01	0.1
116	Lead hydrogen arsenate	7784-40-9	< 0.01	0.1
117	Sodium dichromate	7789-12-0 10588-01-9	< 0.01	0.1
118	Triethyl arsenate	15606-95-8	< 0.01	0.1

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119 Lead chromate 7758-97-6 < 0.01 0.1

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No.	Substance Name		CAS Number	Concentration (%)	Limit (%)
120	Lead chromate molybda Pigment Red 104)		12656-85-8	< 0.01	0.1
121	Lead sulfochromate yell 34)	ow (C.I. Pigment Yellow	1344-37-2	< 0.01	0.1
122	Boric acid; Boric acid, crude natura	I	10043-35-3 11113-50-1	< 0.01	0.1
123	Disodium tetraborate, anhydrous		1303-96-4 1330-43-4 12179-04-3	< 0.01	0.1
124	Tetraboron disodium he	ptaoxide, hydrate	12267-73-1	< 0.01	0.1
125	Sodium chromate	,	7775-11-3	< 0.01	0.1
126	Potassium chromate		7789-00-6	< 0.01	0.1
127	Ammonium dichromate		7789-09-5	< 0.01	0.1
128	Potassium dichromate		7778-50-9	< 0.01	0.1
129	Cobalt(II) sulphate		10124-43-3	< 0.01	0.1
130	Cobalt(II) dinitrate		10141-05-6	< 0.01	0.1
131	Cobalt(II) carbonate		513-79-1	< 0.01	0.1
132	Cobalt(II) diacetate		71-48-7	< 0.01	0.1
133	Chromium trioxide		1333-82-0	< 0.01	0.1
134	Acids generated from	Chromic acid	7738-94-5	< 0.01	0.1
	chromium trioxide and their oligomers	Dichromic acid	13530-68-2	< 0.01	0.1
135	Strontium chromate		7789-06-2	< 0.01	0.1
136	Lead dipicrate		6477-64-1	< 0.01	0.1
137	Lead styphnate		15245-44-0	< 0.01	0.1
138	Lead diazide, Lead azid	е	13424-46-9	< 0.01	0.1
139	Trilead diarsenate		3687-31-8	< 0.01	0.1
140	Calcium arsenate		7778-44-1	< 0.01	0.1
141	Arsenic acid		7778-39-4	< 0.01	0.1
142	Zirconia Aluminosilicate	Refractory Ceramic Fibres	650-017-00-8*	< 0.01	0.1
143	Aluminosilicate Refracto	ory Ceramic Fibres	650-017-00-8*	< 0.01	0.1
144	Pentazinc chromate oct	ahydroxide	49663-84-5	< 0.01	0.1
145	Potassium hydroxyocta		11103-86-9	< 0.01	0.1
146	Dichromium tris(chroma	te)	24613-89-6	< 0.01	0.1
147	Diboron trioxide		1303-86-2	< 0.01	0.1
148	Lead(II) bis(methanesul	fonate)	17570-76-2	< 0.01	0.1
149	Acetic acid, lead salt, ba	asic	51404-69-4	< 0.01	0.1
150	Trilead bis(carbonate) d	ihydroxide	1319-46-6	< 0.01	0.1
151	Lead oxide sulfate		12036-76-9	< 0.01	0.1
152	[Phthalato(2-)]dioxotrilea	ad	69011-06-9	< 0.01	0.1
153	Dioxobis(stearato)trilead		12578-12-0	< 0.01	0.1
154	Fatty acids, C16-18, lea	d salts	91031-62-8	< 0.01	0.1

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(%)     (%)       < 0.01     0.1       < 0.01     0.1       < 0.01     0.1       < 0.01     0.1       < 0.01     0.1       < 0.01     0.1       < 0.01     0.1       < 0.01     0.1       < 0.01     0.1       < 0.01     0.1       < 0.01     0.1       < 0.01     0.1
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195	Phenanthrene	85-01-8	< 0.01	0.1
196	Pyrene	129-00-0	< 0.01	0.1
197	1,7,7-trimethyl-3- (phenylmethylene)bicyclo[2.2.1]heptan-2-one	15087-24-8	< 0.01	0.1

#### REMARK:

- 1. The substances were tested in term of its respective elements (i.e Arsenic, Chromium, Cobalt, Lead, Tin, Aluminum, Zirconium, Silicon, Boron, Strontium, Zinc, Antimony, Barium, Titanium and Cadmium).
- 2. The reporting limit is 0.01%.
- 3. In case SVHC <0.1% for articles "No further obligations regarding communication along the supply chain or notification emerge from the analytical findings in the tested sample". In case SVHC>0.1% for articles "Further obligations regarding communication along the supply chain or notification may emerge from the analytical findings in the tested sample.
- \* No CAS number and EC number for are applied for (i) Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) and (ii) Aluminosilicate Refractory Ceramic Fibres (RCF). Instead, the Index Numbers in Annex VI, part 3, table 3.1 (list of harmonised classification and labelling of hazardous substances) and table 3.2 (list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/578/EEC) of Regulation (EC) No 1272/2008 are applied.

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# (03) 197 Substances of Very High Concern (SVHC) Screening Test

Acid digestion followed by ICP-AES analysis, Solvent extraction followed by GC/MS, GC/ECD, and LC/MS/MS, Headspace sampling followed by GC/MS

Result: PASS

### 011+012+013+014+015+016+017+018+036

No.	Substance Name	CAS Number	Concentration (%)	Limit (%)
1	Dibutyl phthalate (DBP)	84-74-2	< 0.01	0.1
2	Diisobutyl phthlalate (DIBP)	84-69-5	< 0.01	0.1
3	Benzyl butyl phthalate (BBP)	85-68-7	< 0.01	0.1
4	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	< 0.01	0.1
5	5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)	81-15-2	< 0.01	0.1
6	4,4'-Diaminodiphenyl methane (MDA)	101-77-9	< 0.01	0.1
7	Hexabromocyclododecane (HBCD) and all major diastereoisomers identified; 1,2,5,6,9,10-hexabromocyclodecane; Hexabromocyclododecane; alpha-hexabromocyclododecane; beta-hexabromocyclododecane; gamma-hexabromocyclododecane	3194- 55-6, 25637-99-4; 134237-50-6; 134237-51-7; 134237-52-8	< 0.01	0.1
8	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	< 0.01	0.1
9	Anthracene	120-12-7	< 0.01	0.1
10	Acrylamide	79-06-1	< 0.01	0.1
11	2,4-Dinitrotoluene	121-14-2	< 0.01	0.1
12	Tris(2-chloroethyl) phosphate	115-96-8	< 0.01	0.1
13	Anthracene oil	90640-80-5	< 0.01	0.1
14	Anthracene oil, anthracene paste, distillation light	91995-17-4	< 0.01	0.1
15	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	< 0.01	0.1
16	Anthracene oil, anthracene-low	90640-82-7	< 0.01	0.1
17	Anthracene oil, anthracene paste	90640-81-6	< 0.01	0.1
18	Coal tar pitch, high temperature	65996-93-2	< 0.01	0.1
19	Trichloroethylene	79-01-6	< 0.01	0.1

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No.	Substance Name		CAS Number	Concentration (%)	Limit (%)
20	2-Methoxyethanol		109-86-4	< 0.01	0.1
21	2-Ethoxyethanol		110-80-5	< 0.01	0.1
22	2-Ethoxyethyl aceta		111-15-9	< 0.01	0.1
23	1,2-Benzenedicarbo	oxylic acid, di-C7-11-branched ers (DHNUP)	68515-42-4	< 0.01	0.1
24	Hydrazine		302-01-2; 7803-57-8	< 0.01	0.1
25	1-Methyl-2-pyrrolide	one (NMP)	872-50-4	< 0.01	0.1
26	1,2,3-Trichloroprop		96-18-4	< 0.01	0.1
27	1,2-Benzenedicarbe	oxylic acid, di-C6-8-branched ers, C7-rich (DIHP)	71888-89-6	< 0.01	0.1
28	2,2'-dichloro-4,4'-m	ethylenedianiline (MOCA)	101-14-4	< 0.01	0.1
29	N,N-dimethylacetar		127-19-5	< 0.01	0.1
30	Bis(2-methoxyethyl	) ether	111-96-6	< 0.01	0.1
31	1,2-Dichloroethane		107-06-2	< 0.01	0.1
32	2-Methoxyaniline o-Anisidine		90-04-0	< 0.01	0.1
33	Bis(2-methoxyethyl) phthalate		117-82-8	< 0.01	0.1
34	Formaldehyde, oligomeric reaction products with aniline		25214-70-4	< 0.01	0.1
35	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)		112-49-2	< 0.01	0.1
36	1,2-dimethoxyethar ether (EGDME)	ne; ethylene glycol dimethyl	110-71-4	< 0.01	0.1
37	Formamide		75-12-7	< 0.01	0.1
38	trione (TGIC)	ylmethyl)-1,3,5-triazinane-2,4,6-	2451-62-9	< 0.01	0.1
39	1,3,5-tris[(2S and 2 triazine-2,4,6-(1H,3	R)-2,3-epoxypropyl]-1,3,5- H,5H)-trione (β-TGIC)	59653-74-6	< 0.01	0.1
40	Bis(pentabromophe (decabromodiphen)	enyl) ether /l ether) (DecaBDE)	1163-19-5	< 0.01	0.1
41	Cyclohexane-1,2-dicarboxylic anhydride (Hexahydrophthalic anhydride - HHPA) Combination of the cis-, trans isomers		85-42-7; 14166-21-3; 13149-00-3	< 0.01	0.1
42		Hexahydromethylphthalic anhydride	25550-51-0	< 0.01	0.1
	Hexahydromethyl	Hexahydro-4-methylphthalic anhydride	19438-60-9	< 0.01	0.1
	phthalic anhydride	Hexahydro-1-methylphthalic anhydride	48122-14-1	< 0.01	0.1
		Hexahydro-3-methylphthalic anhydride	57110-29-9	< 0.01	0.1

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No.	Substance Name		CAS Number	Concentration (%)	Limit (%)
43	1,2-Benzenedicarl branched and line	boxylic acid, dipentylester, ar	84777-06-0	< 0.01	0.1
44	Diisopentyl phthal		605-50-5	< 0.01	0.1
45	N-pentyl-isopentyl		776297-69-9	< 0.01	0.1
46	1,2-Diethoxyethan		629-14-1	< 0.01	0.1
47	N,N-dimethylforma		68-12-2	< 0.01	0.1
48	Furan		110-00-9	< 0.01	0.1
49	Methyloxirane (Pro	opylene oxide)	75-56-9	< 0.01	0.1
50	Diethyl sulphate		64-67-5	< 0.01	0.1
51	Dimethyl sulphate		77-78-1	< 0.01	0.1
52	4,4'-methylenedi-c	o-toluidine	838-88-0	< 0.01	0.1
53	4,4'-oxydianiline a	nd its salts	101-80-4	< 0.01	0.1
54	4-Aminoazobenze	ne	60-09-3	< 0.01	0.1
55	4-methyl-m-pheny diamine)	lenediamine (2,4-toluene-	95-80-7	< 0.01	0.1
56	6-methoxy-m-tolui	dine (p-cresidine)	120-71-8	< 0.01	0.1
57	Biphenyl-4-ylamin		92-67-1	< 0.01	0.1
58	o-aminoazotoluen	e	97-56-3	< 0.01	0.1
59	o-Toluidine; 2-Ami	inotoluene	95-53-4	< 0.01	0.1
60	N-methylacetamide		79-16-3	< 0.01	0.1
61	1-bromopropane;	n-propyl bromide	106-94-5	< 0.01	0.1
62	Dipentyl phthalate		131-18-0	< 0.01	0.1
63	Dihexyl phthalate	(DnHP)	84-75-3	< 0.01	0.1
64	Trixylyl phosphate		25155-23-1	< 0.01	0.1
65		boxylic acid, dihexyl ester, ar (DIHP + DnHP)	68515-50-4	< 0.01	0.1
66	1,2- benzenedicarbo xylic acid, di-C6-	1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters (C6, C7, C8, C9, C10)	68515-51-5	< 0.01	0.1
	10-alkyl esters or mixed decyl and hexyl and octyl diesters	1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters (C6, C8 and C10)	68648-93-1	< 0.01	0.1
67	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2]		-	< 0.01	0.1
68	1,3-propanesulton	е	1120-71-4	< 0.01	0.1
69	Nitrobenzene		96-95-3	< 0.01	0.1
70	Benzo[a]pyrene		50-32-8	< 0.01	0.1
71	Chrysene		218-01-9	< 0.01	0.1
72	Benz[a]anthracene	е	56-55-3	< 0.01	0.1

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No.	Substance Name	CAS Number	Concentration	Limit	
	Substance Name		(%)	(%)	
73	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	< 0.01	0.1	
74	Phenolphthalein	77-09-8	< 0.01	0.1	
75	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	< 0.01	0.1	
76	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	< 0.01	0.1	
77	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1- ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9	< 0.01	0.1	
78	[4-[[4-anilino-1-naphthyl][4- (dimethylamino)phenyl]methylene]cyclohexa-2,5- dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	2580-56-5	< 0.01	0.1	
79	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	< 0.01	0.1	
80	Pentacosafluorotridecanoic acid	72629-94-8	< 0.01	0.1	
81	Tricosafluorododecanoic acid	307-55-1	< 0.01	0.1	
82	Henicosafluoroundecanoic acid	2058-94-8	< 0.01	0.1	
83	Heptacosafluorotetradecanoic acid	376-06-7	< 0.01	0.1	
84	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	-	< 0.01	0.1	
85	4-Nonylphenol, branched and linear	-	< 0.01	0.1	
86	Methoxyacetic acid	625-45-6	< 0.01	0.1	
87	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	< 0.01	0.1	
88	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	< 0.01	0.1	
89	Diazene-1,2-dicarboxamide (C,C'- azodi(formamide)) (ADCA)	123-77-3	< 0.01	0.1	
90	4,4'-bis(dimethylamino)-4"-(methylamino)trityl alcohol	561-41-1	< 0.01	0.1	
91	4-Nonylphenol, branched and linear, ethoxylated	-	< 0.01	0.1	
92	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	< 0.01	0.1	
93	Pentadecafluorooctanoic acid (PFOA)	335-67-1	< 0.01	0.1	
94	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	< 0.01	0.1	
95	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	< 0.01	0.1	
96	Imidazolidine-2-thione; (2-imidazoline-2-thiol); Ethylenethiourea	96-45-7	< 0.01	0.1	

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No.	Substance Name	CAS Number	Concentration (%)	Limit (%)
97	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	< 0.01	0.1
98	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	< 0.01	0.1
99	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	< 0.01	0.1
100	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	< 0.01	0.1
101	Perfluorononan-1-oic-acid and its sodium and ammonium salts;	375-95-1 21049-39-8 4149-60-4	< 0.01	0.1
102	4,4'-isopropylidenediphenol (bisphenol A)	80-05-7	< 0.01	0.1
103	nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	335-76-2 3108-42-7 3830-45-3	< 0.01	0.1
104	4-heptylphenol, branched and linear	1987-50-4 6465-71-0 6465-74-3 6863-24-7	< 0.01	0.1
105	4-tert-pentylphenol / p-(1,1-dimethylpropyl)phenol	80-46-6	< 0.01	0.1
106	Perfluorohexane-1-sulphonic acid and its salts (PFHxS)	Perfluorohexane-1-sulphonic acid and its salts		0.1
107	Dechlorane plus	13560-89-9 135821-74-8 135821-03-3	< 0.01	0.1
108	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)	-	< 0.01	0.1
109	Bis(tributyltin)oxide (TBTO)	56-35-9	< 0.01	0.1
110	Dibutyltin dichloride (DBTC)	683-18-1	< 0.01	0.1
111	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	< 0.01	0.1
112	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	-	< 0.01	0.1
113	Cobalt dichloride	7646-79-9	< 0.01	0.1
114	Diarsenic pentaoxide	1303-28-2	< 0.01	0.1
115	Diarsenic trioxide	1327-53-3	< 0.01	0.1
116	Lead hydrogen arsenate	7784-40-9	< 0.01	0.1
117	Sodium dichromate	7789-12-0 10588-01-9	< 0.01	0.1
118	Triethyl arsenate	15606-95-8	< 0.01	0.1

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119 Lead chromate 7758-97-6 < 0.01 0.1

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No.	Substance Name		CAS Number	Concentration (%)	Limit (%)
120	Lead chromate molybda Pigment Red 104)		12656-85-8	< 0.01	0.1
121	Lead sulfochromate yell 34)	low (C.I. Pigment Yellow	1344-37-2	< 0.01	0.1
122	Boric acid; Boric acid, crude natura	ıl	10043-35-3 11113-50-1	< 0.01	0.1
123	Disodium tetraborate, a	nhydrous	1303-96-4 1330-43-4 12179-04-3	< 0.01	0.1
124	Tetraboron disodium he	eptaoxide, hydrate	12267-73-1	< 0.01	0.1
125	Sodium chromate	, , , , , , , , , , , , , , , , , , ,	7775-11-3	< 0.01	0.1
126	Potassium chromate		7789-00-6	< 0.01	0.1
127	Ammonium dichromate		7789-09-5	< 0.01	0.1
128	Potassium dichromate		7778-50-9	< 0.01	0.1
129	Cobalt(II) sulphate		10124-43-3	< 0.01	0.1
130	Cobalt(II) dinitrate		10141-05-6	< 0.01	0.1
131	Cobalt(II) carbonate		513-79-1	< 0.01	0.1
132	Cobalt(II) diacetate		71-48-7	< 0.01	0.1
133	Chromium trioxide		1333-82-0	< 0.01	0.1
134	Acids generated from	Chromic acid	7738-94-5	< 0.01	0.1
	chromium trioxide and their oligomers	Dichromic acid	13530-68-2	< 0.01	0.1
135	Strontium chromate		7789-06-2	< 0.01	0.1
136	Lead dipicrate		6477-64-1	< 0.01	0.1
137	Lead styphnate		15245-44-0	< 0.01	0.1
138	Lead diazide, Lead azid	le	13424-46-9	< 0.01	0.1
139	Trilead diarsenate		3687-31-8	< 0.01	0.1
140	Calcium arsenate		7778-44-1	< 0.01	0.1
141	Arsenic acid		7778-39-4	< 0.01	0.1
142	Zirconia Aluminosilicate	Refractory Ceramic Fibres	650-017-00-8*	< 0.01	0.1
143	Aluminosilicate Refracto	ory Ceramic Fibres	650-017-00-8*	< 0.01	0.1
144	Pentazinc chromate oct	ahydroxide	49663-84-5	< 0.01	0.1
145	Potassium hydroxyocta	oxodizincatedichromate	11103-86-9	< 0.01	0.1
146	Dichromium tris(chroma	ite)	24613-89-6	< 0.01	0.1
147	Diboron trioxide		1303-86-2	< 0.01	0.1
148	Lead(II) bis(methanesulfonate)		17570-76-2	< 0.01	0.1
149	Acetic acid, lead salt, ba	asic	51404-69-4	< 0.01	0.1
150	Trilead bis(carbonate) d	lihydroxide	1319-46-6	< 0.01	0.1
151	Lead oxide sulfate		12036-76-9	< 0.01	0.1
152	[Phthalato(2-)]dioxotrile	ad	69011-06-9	< 0.01	0.1
153	Dioxobis(stearato)trilea		12578-12-0	< 0.01	0.1
154	Fatty acids, C16-18, lea	id salts	91031-62-8	< 0.01	0.1

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No.	Cub store on Name	CAC November	Concentration	Limit
	Substance Name	CAS Number	(%)	(%)
155	Lead bis(tetrafluoroborate)	13814-96-5	< 0.01	0.1
156	Lead cynamidate	20837-86-9	< 0.01	0.1
157	Lead dinitrate	10099-74-8	< 0.01	0.1
158	Lead monoxide (lead oxide)	1317-36-8	< 0.01	0.1
159	Orange lead (lead tetroxide)	1314-41-6	< 0.01	0.1
160	Lead titanium trioxide	12060-00-3	< 0.01	0.1
161	Lead Titanium Zirconium Oxide	12626-81-2	< 0.01	0.1
162	Pentalead tetraoxide sulphate	12065-90-6	< 0.01	0.1
163	Pyrochlore, antimony lead yellow	8012-00-8	< 0.01	0.1
164	Silicic acid (H <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), barium salt (1:1), lead-doped	68784-75-8	< 0.01	0.1
165	Silicic acid, lead salt	11120-22-2	< 0.01	0.1
166	Sulfurous acid, lead salt, dibasic	62229-08-7	< 0.01	0.1
167	Tetraethyllead	78-00-2	< 0.01	0.1
168	Tetralead trioxide sulphate	12202-17-4	< 0.01	0.1
169	Trilead dioxide phosphonate	12141-20-7	< 0.01	0.1
170	Cadmium	7440-43-9	< 0.01	0.1
171	Cadmium oxide	1306-19-0	< 0.01	0.1
172	Cadmium sulphide	1306-23-6	< 0.01	0.1
173	Lead di(acetate)	301-04-2	< 0.01	0.1
174	Sodium peroxometaborate	7632-04-4	< 0.01	0.1
175	Cadmium chloride	10108-64-2	< 0.01	0.1
176	Sodium perborate;	15120-21-5;		
	perboric acid, sodium salt	11138-47-9	< 0.01	0.1
177	Cadmium fluoride	7790-79-6	< 0.01	0.1
178		10124-36-4		
	Cadmium sulphate	31119-53-6	< 0.01	0.1
179	Cadmium nitrate	10325-94-7	< 0.01	0.1
180	Cadmium hydroxide	21041-95-2	< 0.01	0.1
181	Cadmium carbonate	513-78-0	< 0.01	0.1
182	Octamethylcyclotetrasiloxane (D4)	556-67-2	< 0.01	0.1
183	Decamethylcyclopentasiloxane (D5)	541-02-6	< 0.01	0.1
184	Dodecamethylcyclohexasiloxane (D6)	540-97-6	< 0.01	0.1
185	Lead	7439-92-1	< 0.01	0.1
186	Disodium octaborate	12008-41-2	< 0.01	0.1
187	Benzo[ghi]perylene	191-24-2	< 0.01	0.1
188	Terphenyl hydrogenated	61788-32-7	< 0.01	0.1
189	Ethylenediamine (EDA)	107-15-3	< 0.01	0.1
190	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride) (TMA)	552-30-7	< 0.01	0.1
191	Dicyclohexyl phthalate (DCHP)	84-61-7	< 0.01	0.1
192	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	< 0.01	0.1
192	Benzo[k]fluoranthene	207-08-9	< 0.01	0.1
193	Fluoranthene	206-44-0	< 0.01	0.1

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195	Phenanthrene	85-01-8	< 0.01	0.1
196	Pyrene	129-00-0	< 0.01	0.1
197	1,7,7-trimethyl-3- (phenylmethylene)bicyclo[2.2.1]heptan-2-one	15087-24-8	< 0.01	0.1

### REMARK:

- 1. The substances were tested in term of its respective elements (i.e Arsenic, Chromium, Cobalt, Lead, Tin, Aluminum, Zirconium, Silicon, Boron, Strontium, Zinc, Antimony, Barium, Titanium and Cadmium).
- 2. The reporting limit is 0.01%.
- 3. In case SVHC <0.1% for articles "No further obligations regarding communication along the supply chain or notification emerge from the analytical findings in the tested sample". In case SVHC>0.1% for articles "Further obligations regarding communication along the supply chain or notification may emerge from the analytical findings in the tested sample.
- \* No CAS number and EC number for are applied for (i) Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) and (ii) Aluminosilicate Refractory Ceramic Fibres (RCF). Instead, the Index Numbers in Annex VI, part 3, table 3.1 (list of harmonised classification and labelling of hazardous substances) and table 3.2 (list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/578/EEC) of Regulation (EC) No 1272/2008 are applied.

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# (03) 197 Substances of Very High Concern (SVHC) Screening Test

Acid digestion followed by ICP-AES analysis, Solvent extraction followed by GC/MS, GC/ECD, and LC/MS/MS, Headspace sampling followed by GC/MS

Result: PASS

### 019+020+021+022+023+024+025+026

No.	Substance Name	CAS Number	Concentration (%)	Limit (%)
1	Dibutyl phthalate (DBP)	84-74-2	< 0.01	0.1
2	Diisobutyl phthlalate (DIBP)	84-69-5	< 0.01	0.1
3	Benzyl butyl phthalate (BBP)	85-68-7	< 0.01	0.1
4	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	< 0.01	0.1
5	5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)	81-15-2	< 0.01	0.1
6	4,4'-Diaminodiphenyl methane (MDA)	101-77-9	< 0.01	0.1
7	Hexabromocyclododecane (HBCD) and all major diastereoisomers identified; 1,2,5,6,9,10-hexabromocyclodecane; Hexabromocyclododecane; alpha-hexabromocyclododecane; beta-hexabromocyclododecane; gamma-hexabromocyclododecane	3194- 55-6, 25637-99-4; 134237-50-6; 134237-51-7; 134237-52-8	< 0.01	0.1
8	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	< 0.01	0.1
9	Anthracene	120-12-7	< 0.01	0.1
10	Acrylamide	79-06-1	< 0.01	0.1
11	2,4-Dinitrotoluene	121-14-2	< 0.01	0.1
12	Tris(2-chloroethyl) phosphate	115-96-8	< 0.01	0.1
13	Anthracene oil	90640-80-5	< 0.01	0.1
14	Anthracene oil, anthracene paste, distillation light	91995-17-4	< 0.01	0.1
15	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	< 0.01	0.1
16	Anthracene oil, anthracene-low	90640-82-7	< 0.01	0.1
17	Anthracene oil, anthracene paste	90640-81-6	< 0.01	0.1
18	Coal tar pitch, high temperature	65996-93-2	< 0.01	0.1
19	Trichloroethylene	79-01-6	< 0.01	0.1

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No.	Substance Name		CAS Number	Concentration (%)	Limit (%)
20	2-Methoxyethanol		109-86-4	< 0.01	0.1
21	2-Ethoxyethanol		110-80-5	< 0.01	0.1
22	2-Ethoxyethyl aceta	ate	111-15-9	< 0.01	0.1
23		oxylic acid, di-C7-11-branched	68515-42-4	< 0.01	0.1
24	Hydrazine	,	302-01-2; 7803-57-8	< 0.01	0.1
25	1-Methyl-2-pyrrolide		872-50-4	< 0.01	0.1
26	1,2,3-Trichloroprop		96-18-4	< 0.01	0.1
27	1,2-Benzenedicarbe	oxylic acid, di-C6-8-branched ers, C7-rich (DIHP)	71888-89-6	< 0.01	0.1
28	2,2'-dichloro-4,4'-m	ethylenedianiline (MOCA)	101-14-4	< 0.01	0.1
29	N,N-dimethylacetar	mide (DMAC)	127-19-5	< 0.01	0.1
30	Bis(2-methoxyethyl		111-96-6	< 0.01	0.1
31	1,2-Dichloroethane		107-06-2	< 0.01	0.1
32	2-Methoxyaniline o-Anisidine		90-04-0	< 0.01	0.1
33	Bis(2-methoxyethyl) phthalate		117-82-8	< 0.01	0.1
34	Formaldehyde, oligomeric reaction products with aniline		25214-70-4	< 0.01	0.1
35	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)		112-49-2	< 0.01	0.1
36		ne; ethylene glycol dimethyl	110-71-4	< 0.01	0.1
37	Formamide		75-12-7	< 0.01	0.1
38	trione (TGIC)	ylmethyl)-1,3,5-triazinane-2,4,6-	2451-62-9	< 0.01	0.1
39	triazine-2,4,6-(1H,3	R)-2,3-epoxypropyl]-1,3,5- H,5H)-trione (β-TGIC)	59653-74-6	< 0.01	0.1
40	Bis(pentabromophe (decabromodipheny	enyl) ether yl ether) (DecaBDE)	1163-19-5	< 0.01	0.1
41	Cyclohexane-1,2-di (Hexahydrophthalic Combination of the		85-42-7; 14166-21-3; 13149-00-3	< 0.01	0.1
42		Hexahydromethylphthalic anhydride	25550-51-0	< 0.01	0.1
	Hexahydromethyl phthalic	Hexahydro-4-methylphthalic anhydride	19438-60-9	< 0.01	0.1
	anhydride	Hexahydro-1-methylphthalic anhydride	48122-14-1	< 0.01	0.1
		Hexahydro-3-methylphthalic anhydride	57110-29-9	< 0.01	0.1

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No.	Substance Name		CAS Number	Concentration (%)	Limit (%)
43	1,2-Benzenedicarl branched and line	boxylic acid, dipentylester, ar	84777-06-0	< 0.01	0.1
44	Diisopentyl phthal		605-50-5	< 0.01	0.1
45	N-pentyl-isopentyl		776297-69-9	< 0.01	0.1
46	1,2-Diethoxyethan		629-14-1	< 0.01	0.1
47	N,N-dimethylforma		68-12-2	< 0.01	0.1
48	Furan		110-00-9	< 0.01	0.1
49	Methyloxirane (Pro	opylene oxide)	75-56-9	< 0.01	0.1
50	Diethyl sulphate		64-67-5	< 0.01	0.1
51	Dimethyl sulphate		77-78-1	< 0.01	0.1
52	4,4'-methylenedi-c	o-toluidine	838-88-0	< 0.01	0.1
53	4,4'-oxydianiline a	nd its salts	101-80-4	< 0.01	0.1
54	4-Aminoazobenze	ne	60-09-3	< 0.01	0.1
55	4-methyl-m-pheny diamine)	lenediamine (2,4-toluene-	95-80-7	< 0.01	0.1
56	6-methoxy-m-tolui	dine (p-cresidine)	120-71-8	< 0.01	0.1
57	Biphenyl-4-ylamin		92-67-1	< 0.01	0.1
58	o-aminoazotoluen	e	97-56-3	< 0.01	0.1
59	o-Toluidine; 2-Ami	inotoluene	95-53-4	< 0.01	0.1
60	N-methylacetamide		79-16-3	< 0.01	0.1
61	1-bromopropane;	n-propyl bromide	106-94-5	< 0.01	0.1
62	Dipentyl phthalate		131-18-0	< 0.01	0.1
63	Dihexyl phthalate	(DnHP)	84-75-3	< 0.01	0.1
64	Trixylyl phosphate		25155-23-1	< 0.01	0.1
65		boxylic acid, dihexyl ester, ar (DIHP + DnHP)	68515-50-4	< 0.01	0.1
66	1,2- benzenedicarbo xylic acid, di-C6-	1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters (C6, C7, C8, C9, C10)	68515-51-5	< 0.01	0.1
	10-alkyl esters or mixed decyl and hexyl and octyl diesters	1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters (C6, C8 and C10)	68648-93-1	< 0.01	0.1
67	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2]		-	< 0.01	0.1
68	1,3-propanesulton	е	1120-71-4	< 0.01	0.1
69	Nitrobenzene		96-95-3	< 0.01	0.1
70	Benzo[a]pyrene		50-32-8	< 0.01	0.1
71	Chrysene		218-01-9	< 0.01	0.1
72	Benz[a]anthracene	е	56-55-3	< 0.01	0.1

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No.	Substance Name	CAS Number	Concentration	Limit
70	4 /4 4 0 0 (5155 555 15 15 15 15 15 15 15 15 15 15 1	440.00.0	(%)	(%)
73	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	< 0.01	0.1
74	Phenolphthalein	77-09-8	< 0.01	0.1
75	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	< 0.01	0.1
76	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	< 0.01	0.1
77	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1- ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9	< 0.01	0.1
78	[4-[[4-anilino-1-naphthyl][4- (dimethylamino)phenyl]methylene]cyclohexa-2,5- dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	2580-56-5	< 0.01	0.1
79	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	< 0.01	0.1
80	Pentacosafluorotridecanoic acid	72629-94-8	< 0.01	0.1
81	Tricosafluorododecanoic acid	307-55-1	< 0.01	0.1
82	Henicosafluoroundecanoic acid	2058-94-8	< 0.01	0.1
83	Heptacosafluorotetradecanoic acid	376-06-7	< 0.01	0.1
84	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	-	< 0.01	0.1
85	4-Nonylphenol, branched and linear	-	< 0.01	0.1
86	Methoxyacetic acid	625-45-6	< 0.01	0.1
87	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	< 0.01	0.1
88	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	< 0.01	0.1
89	Diazene-1,2-dicarboxamide (C,C'- azodi(formamide)) (ADCA)	123-77-3	< 0.01	0.1
90	4,4'-bis(dimethylamino)-4"-(methylamino)trityl alcohol	561-41-1	< 0.01	0.1
91	4-Nonylphenol, branched and linear, ethoxylated	-	< 0.01	0.1
92	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	< 0.01	0.1
93	Pentadecafluorooctanoic acid (PFOA)	335-67-1	< 0.01	0.1
94	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	< 0.01	0.1
95	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	< 0.01	0.1
96	Imidazolidine-2-thione; (2-imidazoline-2-thiol); Ethylenethiourea	96-45-7	< 0.01	0.1

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No.	Substance Name	CAS Number	Concentration (%)	Limit (%)
97	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	< 0.01	0.1
98	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	< 0.01	0.1
99	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	< 0.01	0.1
100	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	< 0.01	0.1
101	Perfluorononan-1-oic-acid and its sodium and ammonium salts;	375-95-1 21049-39-8 4149-60-4	< 0.01	0.1
102	4,4'-isopropylidenediphenol (bisphenol A)	80-05-7	< 0.01	0.1
103	nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	335-76-2 3108-42-7 3830-45-3	< 0.01	0.1
104	4-heptylphenol, branched and linear	1987-50-4 6465-71-0 6465-74-3 6863-24-7	< 0.01	0.1
105	4-tert-pentylphenol / p-(1,1-dimethylpropyl)phenol	80-46-6	< 0.01	0.1
106	Perfluorohexane-1-sulphonic acid and its salts (PFHxS)	355-46-4	< 0.01	0.1
107	Dechlorane plus	13560-89-9 135821-74-8 135821-03-3	< 0.01	0.1
108	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)	-	< 0.01	0.1
109	Bis(tributyltin)oxide (TBTO)	56-35-9	< 0.01	0.1
110	Dibutyltin dichloride (DBTC)	683-18-1	< 0.01	0.1
111	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	< 0.01	0.1
112	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	-	< 0.01	0.1
113	Cobalt dichloride	7646-79-9	< 0.01	0.1
114	Diarsenic pentaoxide	1303-28-2	< 0.01	0.1
115	Diarsenic trioxide	1327-53-3	< 0.01	0.1
116	Lead hydrogen arsenate	7784-40-9	< 0.01	0.1
117	Sodium dichromate	7789-12-0 10588-01-9	< 0.01	0.1
118	Triethyl arsenate	15606-95-8	< 0.01	0.1

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119 Lead chromate 7758-97-6 < 0.01 0.1

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No.	Substance Name		CAS Number	Concentration (%)	Limit (%)
120	Lead chromate molybda Pigment Red 104)		12656-85-8	< 0.01	0.1
121	Lead sulfochromate yellow (C.I. Pigment Yellow 34)		1344-37-2	< 0.01	0.1
122	Boric acid; Boric acid, crude natura	I	10043-35-3 11113-50-1	< 0.01	0.1
123	Disodium tetraborate, a	nhydrous	1303-96-4 1330-43-4 12179-04-3	< 0.01	0.1
124	Tetraboron disodium he	ptaoxide, hydrate	12267-73-1	< 0.01	0.1
125	Sodium chromate		7775-11-3	< 0.01	0.1
126	Potassium chromate		7789-00-6	< 0.01	0.1
127	Ammonium dichromate		7789-09-5	< 0.01	0.1
128	Potassium dichromate		7778-50-9	< 0.01	0.1
129	Cobalt(II) sulphate		10124-43-3	< 0.01	0.1
130	Cobalt(II) dinitrate		10141-05-6	< 0.01	0.1
131	Cobalt(II) carbonate		513-79-1	< 0.01	0.1
132	Cobalt(II) diacetate		71-48-7	< 0.01	0.1
133	Chromium trioxide		1333-82-0	< 0.01	0.1
134	Acids generated from	Chromic acid	7738-94-5	< 0.01	0.1
	chromium trioxide and their oligomers	Dichromic acid	13530-68-2	< 0.01	0.1
135	Strontium chromate		7789-06-2	< 0.01	0.1
136	Lead dipicrate		6477-64-1	< 0.01	0.1
137	Lead styphnate		15245-44-0	< 0.01	0.1
138	Lead diazide, Lead azid	e	13424-46-9	< 0.01	0.1
139	Trilead diarsenate		3687-31-8	< 0.01	0.1
140	Calcium arsenate		7778-44-1	< 0.01	0.1
141	Arsenic acid		7778-39-4	< 0.01	0.1
142	Zirconia Aluminosilicate	Refractory Ceramic Fibres	650-017-00-8*	< 0.01	0.1
143	Aluminosilicate Refracto		650-017-00-8*	< 0.01	0.1
144	Pentazinc chromate oct	ahydroxide	49663-84-5	< 0.01	0.1
145	Potassium hydroxyocta		11103-86-9	< 0.01	0.1
146	Dichromium tris(chroma		24613-89-6	< 0.01	0.1
147	Diboron trioxide		1303-86-2	< 0.01	0.1
148	Lead(II) bis(methanesulfonate)		17570-76-2	< 0.01	0.1
149	Acetic acid, lead salt, basic		51404-69-4	< 0.01	0.1
150	Trilead bis(carbonate) dihydroxide		1319-46-6	< 0.01	0.1
151	Lead oxide sulfate		12036-76-9	< 0.01	0.1
152	[Phthalato(2-)]dioxotrilea	ad	69011-06-9	< 0.01	0.1
153	Dioxobis(stearato)trilead		12578-12-0	< 0.01	0.1
154	Fatty acids, C16-18, lea		91031-62-8	< 0.01	0.1

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No.	Substance Name	CAC Number	Concentration	Limit
	Substance Name	CAS Number	(%)	(%)
155	Lead bis(tetrafluoroborate)	13814-96-5	< 0.01	0.1
156	Lead cynamidate	20837-86-9	< 0.01	0.1
157	Lead dinitrate	10099-74-8	< 0.01	0.1
158	Lead monoxide (lead oxide)	1317-36-8	< 0.01	0.1
159	Orange lead (lead tetroxide)	1314-41-6	< 0.01	0.1
160	Lead titanium trioxide	12060-00-3	< 0.01	0.1
161	Lead Titanium Zirconium Oxide	12626-81-2	< 0.01	0.1
162	Pentalead tetraoxide sulphate	12065-90-6	< 0.01	0.1
163	Pyrochlore, antimony lead yellow	8012-00-8	< 0.01	0.1
164	Silicic acid (H <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), barium salt (1:1), lead-doped	68784-75-8	< 0.01	0.1
165	Silicic acid, lead salt	11120-22-2	< 0.01	0.1
166	Sulfurous acid, lead salt, dibasic	62229-08-7	< 0.01	0.1
167	Tetraethyllead	78-00-2	< 0.01	0.1
168	Tetralead trioxide sulphate	12202-17-4	< 0.01	0.1
169	Trilead dioxide phosphonate	12141-20-7	< 0.01	0.1
170	Cadmium	7440-43-9	< 0.01	0.1
171	Cadmium oxide	1306-19-0	< 0.01	0.1
172	Cadmium sulphide	1306-23-6	< 0.01	0.1
173	Lead di(acetate)	301-04-2	< 0.01	0.1
174	Sodium peroxometaborate	7632-04-4	< 0.01	0.1
175	Cadmium chloride	10108-64-2	< 0.01	0.1
176	Sodium perborate;	15120-21-5;		-
	perboric acid, sodium salt	11138-47-9	< 0.01	0.1
177	Cadmium fluoride	7790-79-6	< 0.01	0.1
178		10124-36-4		
	Cadmium sulphate	31119-53-6	< 0.01	0.1
179	Cadmium nitrate	10325-94-7	< 0.01	0.1
180	Cadmium hydroxide	21041-95-2	< 0.01	0.1
181	Cadmium carbonate	513-78-0	< 0.01	0.1
182	Octamethylcyclotetrasiloxane (D4)	556-67-2	< 0.01	0.1
183	Decamethylcyclopentasiloxane (D5)	541-02-6	< 0.01	0.1
184	Dodecamethylcyclohexasiloxane (D6)	540-97-6	< 0.01	0.1
185	Lead	7439-92-1	< 0.01	0.1
186	Disodium octaborate	12008-41-2	< 0.01	0.1
187	Benzo[ghi]perylene	191-24-2	< 0.01	0.1
188	Terphenyl hydrogenated	61788-32-7	< 0.01	0.1
189	Ethylenediamine (EDA)	107-15-3	< 0.01	0.1
190	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride) (TMA)	552-30-7	< 0.01	0.1
191	Dicyclohexyl phthalate (DCHP)	84-61-7	< 0.01	0.1
192	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	< 0.01	0.1
193	Benzo[k]fluoranthene	207-08-9	< 0.01	0.1
194	Fluoranthene	206-44-0	< 0.01	0.1

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195	Phenanthrene	85-01-8	< 0.01	0.1
196	Pyrene	129-00-0	< 0.01	0.1
197	1,7,7-trimethyl-3- (phenylmethylene)bicyclo[2.2.1]heptan-2-one	15087-24-8	< 0.01	0.1

### REMARK:

- 1. The substances were tested in term of its respective elements (i.e Arsenic, Chromium, Cobalt, Lead, Tin, Aluminum, Zirconium, Silicon, Boron, Strontium, Zinc, Antimony, Barium, Titanium and Cadmium).
- 2. The reporting limit is 0.01%.
- 3. In case SVHC <0.1% for articles "No further obligations regarding communication along the supply chain or notification emerge from the analytical findings in the tested sample". In case SVHC>0.1% for articles "Further obligations regarding communication along the supply chain or notification may emerge from the analytical findings in the tested sample.
- \* No CAS number and EC number for are applied for (i) Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) and (ii) Aluminosilicate Refractory Ceramic Fibres (RCF). Instead, the Index Numbers in Annex VI, part 3, table 3.1 (list of harmonised classification and labelling of hazardous substances) and table 3.2 (list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/578/EEC) of Regulation (EC) No 1272/2008 are applied.

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# (03) 197 Substances of Very High Concern (SVHC) Screening Test

Acid digestion followed by ICP-AES analysis, Solvent extraction followed by GC/MS, GC/ECD, and LC/MS/MS, Headspace sampling followed by GC/MS

Result: PASS

### 027+028+029+030+031+032+033+034+035

No.	Substance Name	CAS Number	Concentration	Limit
	Cubotano Itamo	C7 to Italiiboi	(%)	(%)
1	Dibutyl phthalate (DBP)	84-74-2	< 0.01	0.1
2	Diisobutyl phthlalate (DIBP)	84-69-5	< 0.01	0.1
3	Benzyl butyl phthalate (BBP)	85-68-7	< 0.01	0.1
4	Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	< 0.01	0.1
5	5-tert-butyl-2,4,6-trinitro-m-xylene (Musk xylene)	81-15-2	< 0.01	0.1
6	4,4'-Diaminodiphenyl methane (MDA)	101-77-9	< 0.01	0.1
7	Hexabromocyclododecane (HBCD) and all major			
	diastereoisomers identified;	3194- 55-6,		
	1,2,5,6,9,10-hexabromocyclodecane;	25637-99-4;		
	Hexabromocyclododecane;	134237-50-6;	< 0.01	0.1
	alpha-hexabromocyclododecane;	134237-51-7;		
	beta-hexabromocyclododecane;	134237-52-8		
	gamma-hexabromocyclododecane			
8	Alkanes, C10-13, chloro (Short Chain Chlorinated	85535-84-8	< 0.01	0.1
	Paraffins)			
9	Anthracene	120-12-7	< 0.01	0.1
10	Acrylamide	79-06-1	< 0.01	0.1
11	2,4-Dinitrotoluene	121-14-2	< 0.01	0.1
12	Tris(2-chloroethyl) phosphate	115-96-8	< 0.01	0.1
13	Anthracene oil	90640-80-5	< 0.01	0.1
14	Anthracene oil, anthracene paste, distillation light	91995-17-4	< 0.01	0.1
15	Anthracene oil, anthracene paste, anthracene	91995-15-2	< 0.01	0.1
	fraction			
16	Anthracene oil, anthracene-low	90640-82-7	< 0.01	0.1
17	Anthracene oil, anthracene paste	90640-81-6	< 0.01	0.1
18	Coal tar pitch, high temperature	65996-93-2	< 0.01	0.1
19	Trichloroethylene	79-01-6	< 0.01	0.1

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No.	Substance Name		CAS Number	Concentration (%)	Limit (%)
20	2-Methoxyethanol		109-86-4	< 0.01	0.1
21	2-Ethoxyethanol		110-80-5	< 0.01	0.1
22	2-Ethoxyethyl aceta	ate	111-15-9	< 0.01	0.1
23		oxylic acid, di-C7-11-branched	68515-42-4	< 0.01	0.1
24	Hydrazine		302-01-2; 7803-57-8	< 0.01	0.1
25	1-Methyl-2-pyrrolido		872-50-4	< 0.01	0.1
26	1,2,3-Trichloropropa		96-18-4	< 0.01	0.1
27	1,2-Benzenedicarbo	oxylic acid, di-C6-8-branched ers, C7-rich (DIHP)	71888-89-6	< 0.01	0.1
28	2,2'-dichloro-4,4'-m	ethylenedianiline (MOCA)	101-14-4	< 0.01	0.1
29	N,N-dimethylacetar	nide (DMAC)	127-19-5	< 0.01	0.1
30	Bis(2-methoxyethyl		111-96-6	< 0.01	0.1
31	1,2-Dichloroethane		107-06-2	< 0.01	0.1
32	2-Methoxyaniline o-Anisidine		90-04-0	< 0.01	0.1
33	Bis(2-methoxyethyl) phthalate		117-82-8	< 0.01	0.1
34	Formaldehyde, oligomeric reaction products with aniline		25214-70-4	< 0.01	0.1
35	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)		112-49-2	< 0.01	0.1
36	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)		110-71-4	< 0.01	0.1
37	Formamide		75-12-7	< 0.01	0.1
38	trione (TGIC)	ylmethyl)-1,3,5-triazinane-2,4,6-	2451-62-9	< 0.01	0.1
39	triazine-2,4,6-(1H,3	R)-2,3-epoxypropyl]-1,3,5- H,5H)-trione (β-TGIC)	59653-74-6	< 0.01	0.1
40	Bis(pentabromophe (decabromodiphen)	enyl) ether /l ether) (DecaBDE)	1163-19-5	< 0.01	0.1
41	Cyclohexane-1,2-dicarboxylic anhydride (Hexahydrophthalic anhydride - HHPA) Combination of the cis-, trans isomers		85-42-7; 14166-21-3; 13149-00-3	< 0.01	0.1
42		Hexahydromethylphthalic anhydride	25550-51-0	< 0.01	0.1
	Hexahydromethyl	Hexahydro-4-methylphthalic anhydride	19438-60-9	< 0.01	0.1
	phthalic anhydride	Hexahydro-1-methylphthalic anhydride	48122-14-1	< 0.01	0.1
		Hexahydro-3-methylphthalic anhydride	57110-29-9	< 0.01	0.1

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No.	Substance Name		CAS Number	Concentration (%)	Limit (%)
43	1,2-Benzenedicarl branched and line	boxylic acid, dipentylester, ar	84777-06-0	< 0.01	0.1
44	Diisopentyl phthal		605-50-5	< 0.01	0.1
45	N-pentyl-isopentyl		776297-69-9	< 0.01	0.1
46	1,2-Diethoxyethan		629-14-1	< 0.01	0.1
47	N,N-dimethylforma		68-12-2	< 0.01	0.1
48	Furan		110-00-9	< 0.01	0.1
49	Methyloxirane (Pro	opylene oxide)	75-56-9	< 0.01	0.1
50	Diethyl sulphate		64-67-5	< 0.01	0.1
51	Dimethyl sulphate		77-78-1	< 0.01	0.1
52	4,4'-methylenedi-c	o-toluidine	838-88-0	< 0.01	0.1
53	4,4'-oxydianiline a	nd its salts	101-80-4	< 0.01	0.1
54	4-Aminoazobenze	ne	60-09-3	< 0.01	0.1
55	4-methyl-m-pheny diamine)	lenediamine (2,4-toluene-	95-80-7	< 0.01	0.1
56	6-methoxy-m-tolui	dine (p-cresidine)	120-71-8	< 0.01	0.1
57	Biphenyl-4-ylamin		92-67-1	< 0.01	0.1
58	o-aminoazotoluen	e	97-56-3	< 0.01	0.1
59	o-Toluidine; 2-Ami	inotoluene	95-53-4	< 0.01	0.1
60	N-methylacetamide		79-16-3	< 0.01	0.1
61	1-bromopropane;	n-propyl bromide	106-94-5	< 0.01	0.1
62	Dipentyl phthalate		131-18-0	< 0.01	0.1
63	Dihexyl phthalate	(DnHP)	84-75-3	< 0.01	0.1
64	Trixylyl phosphate		25155-23-1	< 0.01	0.1
65		boxylic acid, dihexyl ester, ar (DIHP + DnHP)	68515-50-4	< 0.01	0.1
66	1,2- benzenedicarbo xylic acid, di-C6-	1,2-Benzenedicarboxylic acid, di-C6-10-alkyl esters (C6, C7, C8, C9, C10)	68515-51-5	< 0.01	0.1
	10-alkyl esters or mixed decyl and hexyl and octyl diesters	1,2-Benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters (C6, C8 and C10)	68648-93-1	< 0.01	0.1
67	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2]		-	< 0.01	0.1
68	1,3-propanesultone		1120-71-4	< 0.01	0.1
69	Nitrobenzene		96-95-3	< 0.01	0.1
70	Benzo[a]pyrene		50-32-8	< 0.01	0.1
71	Chrysene		218-01-9	< 0.01	0.1
72	Benz[a]anthracene	е	56-55-3	< 0.01	0.1

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No.	Substance Name	CAS Number	Concentration	Limit
	1/1/10/01/1	4.40.00.0	(%)	(%)
73	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	< 0.01	0.1
74	Phenolphthalein	77-09-8	< 0.01	0.1
75	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	< 0.01	0.1
76	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	< 0.01	0.1
77	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1- ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9	< 0.01	0.1
78	[4-[[4-anilino-1-naphthyl][4- (dimethylamino)phenyl]methylene]cyclohexa-2,5- dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	2580-56-5	< 0.01	0.1
79	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0	< 0.01	0.1
80	Pentacosafluorotridecanoic acid	72629-94-8	< 0.01	0.1
31	Tricosafluorododecanoic acid	307-55-1	< 0.01	0.1
32	Henicosafluoroundecanoic acid	2058-94-8	< 0.01	0.1
83	Heptacosafluorotetradecanoic acid	376-06-7	< 0.01	0.1
84	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	_	< 0.01	0.1
85	4-Nonylphenol, branched and linear	-	< 0.01	0.1
86	Methoxyacetic acid	625-45-6	< 0.01	0.1
87	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	< 0.01	0.1
88	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	< 0.01	0.1
89	Diazene-1,2-dicarboxamide (C,C'- azodi(formamide)) (ADCA)	123-77-3	< 0.01	0.1
90	4,4'-bis(dimethylamino)-4"-(methylamino)trityl alcohol	561-41-1	< 0.01	0.1
91	4-Nonylphenol, branched and linear, ethoxylated	-	< 0.01	0.1
92	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	< 0.01	0.1
93	Pentadecafluorooctanoic acid (PFOA)	335-67-1	< 0.01	0.1
94	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7	< 0.01	0.1
95	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	< 0.01	0.1
96	Imidazolidine-2-thione; (2-imidazoline-2-thiol); Ethylenethiourea	96-45-7	< 0.01	0.1

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No.	Substance Name	CAS Number	Concentration (%)	Limit (%)
97	2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	< 0.01	0.1
98	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	< 0.01	0.1
99	2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	< 0.01	0.1
100	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	< 0.01	0.1
101	Perfluorononan-1-oic-acid and its sodium and ammonium salts;	375-95-1 21049-39-8 4149-60-4	< 0.01	0.1
102	4,4'-isopropylidenediphenol (bisphenol A)	80-05-7	< 0.01	0.1
103	nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	335-76-2 3108-42-7 3830-45-3	< 0.01	0.1
104	4-heptylphenol, branched and linear	1987-50-4 6465-71-0 6465-74-3 6863-24-7	< 0.01	0.1
105	4-tert-pentylphenol / p-(1,1-dimethylpropyl)phenol	80-46-6	< 0.01	0.1
106	Perfluorohexane-1-sulphonic acid and its salts (PFHxS)	355-46-4	< 0.01	0.1
107	Dechlorane plus	13560-89-9 135821-74-8 135821-03-3	< 0.01	0.1
108	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)	-	< 0.01	0.1
109	Bis(tributyltin)oxide (TBTO)	56-35-9	< 0.01	0.1
110	Dibutyltin dichloride (DBTC)	683-18-1	< 0.01	0.1
111	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	< 0.01	0.1
112	Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	-	< 0.01	0.1
113	Cobalt dichloride	7646-79-9	< 0.01	0.1
114	Diarsenic pentaoxide	1303-28-2	< 0.01	0.1
115	Diarsenic trioxide	1327-53-3	< 0.01	0.1
116	Lead hydrogen arsenate	7784-40-9	< 0.01	0.1
117	Sodium dichromate	7789-12-0 10588-01-9	< 0.01	0.1
118	Triethyl arsenate	15606-95-8	< 0.01	0.1

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119 Lead chromate 7758-97-6 < 0.01 0.1

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No.	Substance Name		CAS Number	Concentration (%)	Limit (%)
120	Lead chromate molybda Pigment Red 104)		12656-85-8	< 0.01	0.1
121	Lead sulfochromate yell 34)	ow (C.I. Pigment Yellow	1344-37-2	< 0.01	0.1
122	Boric acid; Boric acid, crude natura	I	10043-35-3 11113-50-1	< 0.01	0.1
123	Disodium tetraborate, a	nhydrous	1303-96-4 1330-43-4 12179-04-3	< 0.01	0.1
124	Tetraboron disodium he	ptaoxide, hydrate	12267-73-1	< 0.01	0.1
125	Sodium chromate	,	7775-11-3	< 0.01	0.1
126	Potassium chromate		7789-00-6	< 0.01	0.1
127	Ammonium dichromate		7789-09-5	< 0.01	0.1
128	Potassium dichromate		7778-50-9	< 0.01	0.1
129	Cobalt(II) sulphate		10124-43-3	< 0.01	0.1
130	Cobalt(II) dinitrate		10141-05-6	< 0.01	0.1
131	Cobalt(II) carbonate		513-79-1	< 0.01	0.1
132	Cobalt(II) diacetate		71-48-7	< 0.01	0.1
133	Chromium trioxide		1333-82-0	< 0.01	0.1
134	Acids generated from	Chromic acid	7738-94-5	< 0.01	0.1
	chromium trioxide and their oligomers	Dichromic acid	13530-68-2	< 0.01	0.1
135	Strontium chromate		7789-06-2	< 0.01	0.1
136	Lead dipicrate		6477-64-1	< 0.01	0.1
137	Lead styphnate		15245-44-0	< 0.01	0.1
138	Lead diazide, Lead azid	е	13424-46-9	< 0.01	0.1
139	Trilead diarsenate		3687-31-8	< 0.01	0.1
140	Calcium arsenate		7778-44-1	< 0.01	0.1
141	Arsenic acid		7778-39-4	< 0.01	0.1
142	Zirconia Aluminosilicate	Refractory Ceramic Fibres	650-017-00-8*	< 0.01	0.1
143	Aluminosilicate Refracto	ory Ceramic Fibres	650-017-00-8*	< 0.01	0.1
144	Pentazinc chromate oct	ahydroxide	49663-84-5	< 0.01	0.1
145	Potassium hydroxyocta		11103-86-9	< 0.01	0.1
146	Dichromium tris(chromate)		24613-89-6	< 0.01	0.1
147	Diboron trioxide		1303-86-2	< 0.01	0.1
148	Lead(II) bis(methanesulfonate)		17570-76-2	< 0.01	0.1
149	Acetic acid, lead salt, basic		51404-69-4	< 0.01	0.1
150	Trilead bis(carbonate) dihydroxide		1319-46-6	< 0.01	0.1
151	Lead oxide sulfate		12036-76-9	< 0.01	0.1
152	[Phthalato(2-)]dioxotrilea	ad	69011-06-9	< 0.01	0.1
153	Dioxobis(stearato)trilead		12578-12-0	< 0.01	0.1
154	Fatty acids, C16-18, lea	d salts	91031-62-8	< 0.01	0.1

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No.	Cub store on Name	CAC November	Concentration	Limit
	Substance Name	CAS Number	(%)	(%)
155	Lead bis(tetrafluoroborate)	13814-96-5	< 0.01	0.1
156	Lead cynamidate	20837-86-9	< 0.01	0.1
157	Lead dinitrate	10099-74-8	< 0.01	0.1
158	Lead monoxide (lead oxide)	1317-36-8	< 0.01	0.1
159	Orange lead (lead tetroxide)	1314-41-6	< 0.01	0.1
160	Lead titanium trioxide	12060-00-3	< 0.01	0.1
161	Lead Titanium Zirconium Oxide	12626-81-2	< 0.01	0.1
162	Pentalead tetraoxide sulphate	12065-90-6	< 0.01	0.1
163	Pyrochlore, antimony lead yellow	8012-00-8	< 0.01	0.1
164	Silicic acid (H <sub>2</sub> Si <sub>2</sub> O <sub>5</sub> ), barium salt (1:1), lead-doped	68784-75-8	< 0.01	0.1
165	Silicic acid, lead salt	11120-22-2	< 0.01	0.1
166	Sulfurous acid, lead salt, dibasic	62229-08-7	< 0.01	0.1
167	Tetraethyllead	78-00-2	< 0.01	0.1
168	Tetralead trioxide sulphate	12202-17-4	< 0.01	0.1
169	Trilead dioxide phosphonate	12141-20-7	< 0.01	0.1
170	Cadmium	7440-43-9	< 0.01	0.1
171	Cadmium oxide	1306-19-0	< 0.01	0.1
172	Cadmium sulphide	1306-23-6	< 0.01	0.1
173	Lead di(acetate)	301-04-2	< 0.01	0.1
174	Sodium peroxometaborate	7632-04-4	< 0.01	0.1
175	Cadmium chloride	10108-64-2	< 0.01	0.1
176	Sodium perborate;	15120-21-5;		
	perboric acid, sodium salt	11138-47-9	< 0.01	0.1
177	Cadmium fluoride	7790-79-6	< 0.01	0.1
178		10124-36-4		
	Cadmium sulphate	31119-53-6	< 0.01	0.1
179	Cadmium nitrate	10325-94-7	< 0.01	0.1
180	Cadmium hydroxide	21041-95-2	< 0.01	0.1
181	Cadmium carbonate	513-78-0	< 0.01	0.1
182	Octamethylcyclotetrasiloxane (D4)	556-67-2	< 0.01	0.1
183	Decamethylcyclopentasiloxane (D5)	541-02-6	< 0.01	0.1
184	Dodecamethylcyclohexasiloxane (D6)	540-97-6	< 0.01	0.1
185	Lead	7439-92-1	< 0.01	0.1
186	Disodium octaborate	12008-41-2	< 0.01	0.1
187	Benzo[ghi]perylene	191-24-2	< 0.01	0.1
188	Terphenyl hydrogenated	61788-32-7	< 0.01	0.1
189	Ethylenediamine (EDA)	107-15-3	< 0.01	0.1
190	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride) (TMA)	552-30-7	< 0.01	0.1
191	Dicyclohexyl phthalate (DCHP)	84-61-7	< 0.01	0.1
192	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6	< 0.01	0.1
192	Benzo[k]fluoranthene	207-08-9	< 0.01	0.1
193	Fluoranthene	206-44-0	< 0.01	0.1

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195	Phenanthrene	85-01-8	< 0.01	0.1
196	Pyrene	129-00-0	< 0.01	0.1
197	1,7,7-trimethyl-3- (phenylmethylene)bicyclo[2.2.1]heptan-2-one	15087-24-8	< 0.01	0.1

### REMARK:

- 1. The substances were tested in term of its respective elements (i.e Arsenic, Chromium, Cobalt, Lead, Tin, Aluminum, Zirconium, Silicon, Boron, Strontium, Zinc, Antimony, Barium, Titanium and Cadmium).
- 2. The reporting limit is 0.01%.
- 3. In case SVHC <0.1% for articles "No further obligations regarding communication along the supply chain or notification emerge from the analytical findings in the tested sample". In case SVHC>0.1% for articles "Further obligations regarding communication along the supply chain or notification may emerge from the analytical findings in the tested sample.
- \* No CAS number and EC number for are applied for (i) Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) and (ii) Aluminosilicate Refractory Ceramic Fibres (RCF). Instead, the Index Numbers in Annex VI, part 3, table 3.1 (list of harmonised classification and labelling of hazardous substances) and table 3.2 (list of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/578/EEC) of Regulation (EC) No 1272/2008 are applied.

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## (04) Fibre Content [EU Regulation No. 1007:2011 With Amendment From EU No.286/2012]

By using: Microscopical analysis

Sample	<u>Fiber</u>	Fiber Content (%)	Claimed (%)	Requirement (%)	
041	Cotton	100.0	-	-	NC
042	Cotton	100.0	-	-	NC
043	Cotton	100.0	-	-	NC
044	Cotton	100.0	-	-	NC
045	Cotton	100.0	-	-	NC
046	Cotton	100.0	-	-	NC
047	Cotton	100.0	-	-	NC
048	Cotton	100.0	-	-	NC
049	Cotton	100.0	-	-	NC
050	Cotton	100.0	-	-	NC
051	Cotton	100.0	-	-	NC
052	Cotton	100.0	-	-	NC
053	Cotton	100.0	-	-	NC
054	Cotton	100.0	-	-	NC
Note: -					

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## **Product Photo(s):**



\*\*\*\*\* End of Report \*\*\*\*\*

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#### **UL VS Terms and Conditions**

#### All services are governed by the following Terms and Conditions.

- 1. Verification Services. The UL Contracting Party ("we", "us", or "our" as the context requires) will perform commercial testing, verification, audit, assessment, inspection, and/or other services ("Services") in accordance with your instructions as described in this order, scope of work, project proposal, quotation, or order acknowledgment ("Quotation"). The Services will be limited to an assessment of your samples' conformity to requirements, specifications, and/or protocols you have established ("Your Requirements"), and to not express any opinion regarding the bulk from which the samples were drawn. The Services do not involve any assessment or evaluation to independent safety standards, and we and our affiliates have no responsibility to make any independent safety assessment of any samples.
- Retailer Programs. If you request us to test compliance with retailer, carrier or other third party program ("Retailer") by requesting Services under the Retailer's program, you consent to our disclosure of all associated information, materials, and deliverables to such Retailer and acknowledge that, notwithstanding any terms to the contrary in these Service Terms, the ownership of the deliverables for the Services will be in accordance with the Retailer's program.
- 3. Payment Terms. You will pay, without set off, our fees and related expenses in accordance with the Quotation including the cost of all taxes, wire or transfer fees, duties, and other fiscal charges which become due on the quoted price and will indemnify us from and against liabilities, incurred as a result of failure to pay any such sums when they become due. We may charge interest at 1% per month (12% per year), or the maximum legal rate if less than 1.0% per month, from the due date until paid fully. You agree to pay reasonable collection costs, including attorneys fees, if necessary, in the event of faile or non-payment.
- 4. Your Requirements. You are responsible for establishing or selecting all Your Requirements that we will use in performing the Services. We may provide you with assistance in developing Your Requirements that meet your needs, however, in all cases you must review and approve Your Requirements to be used in performing the Services.
- 5. Estimated Schedule and Price. Any time schedule and pricing terms set forth in this Quotation are estimates only and subject to change upon reasonable notice from us depending upon the specific project.
- 6. On-Site Investigations. If we perform Services on site at your facilities, or at the facilities of other parties as directed by you; you will ensure that our representatives have safe, secure, and free access to the facilities. Our access will not be conditioned upon the execution of any agreement, waiver, or release. If our representatives are prevented from performing or completing any Services for any reason beyond our reasonable control, we will not be responsible for the nonperformance, and you may be charged for any actual expenses we incur and fees for Services performed.
- 7. Deliverables. We will provide you with a report outlining: (i) your instructions and request for Services accepted by us, (ii) Your Requirements used in providing the Services, (iii) the Services performed, and (iv) the results of those Services. We are under no obligation to refer to or report on any facts or circumstances which are outside your specific instructions received and accepted by us.
- 8. Our Findings. We do not guarantee that our opinions or findings will be recognized or accepted by third parties.
- 9. Use of Names and Marks. Except as otherwise authorized by us in writing, you will not use our name, abbreviation, symbols, marks, or the name of any of our subsidiaries, affiliates, or parent on any goods or their containers or packaging, or in connection with any advertising, promotions, or otherwise.
- 10. Cancellation Fees. If you cancel or change a Quotation: (i) for an inspection after 3:00 PM of the working day before the scheduled inspection date, we will charge you the Quotation price plus any travel costs incurred before the cancellation; (ii) for testing after we receive the sample(s) at the testing facility, we will charge you cancellation fees according to the amount of actual work performed with a minimum cancellation fee of \$100 USD; or (iii) for a scheduled audit date, you will be responsible for all incurred non-refundable travel costs associate with that audit. Any change or cancellation of an audit that occurs within 7 days of the scheduled audit will be charged a \$600 USD fee in addition to any incurred travel costs.
- 11. No Warranty. No representation, warranty, or guarantee, express or implied, is included in these terms and conditions, or in any quotation, report, or other document provided under these terms and conditions including, but not limited to: (i) any "implied warranty" or "fitness for a particular purpose", (ii) non-infringement, and (iii) that the web services (as defined below) will be uninterrupted, timely, secure, or error-free.
- 12. Your Information. You represent and warrant that all information and data provided to us by you, or on your behalf, is complete and accurate and may be relied upon to provide Services. In addition, you represent and warrant that all of Your Information is owned or licensed by you, and does not infringe on the intellectual property rights of any third party. If any information or data provided to us by you or on your behalf is either incomplete or inaccurate, we will not be liable in any manner for any deficiencies in the Services.
- 13. Ownership of Work Product. You will own the test reports or other materials provided to you pursuant to any Quotation. We may retain a copy of the test reports and other materials for our archives and for creating reports for you and third parties are required by your
- 14. Web Services. We may provide you with certain website tools and related services, including the ability to order services online through a website (collectively, the "Web Services"). The Web Services are provided to you as a convenience and are provided on an "as is, as available" basis. By using the Web Services, you acknowledge and agree that no data or content transmitted over our networks, the Internet, or wirelessly, or through or in connection with the Web Services, is guaranteed to be secure or free from unauthorized intrusion, and that data stored by us, our affiliates, or our service providers may be deleted, modified, or damaged. You acknowledge that if you wish to protect your transmission of data or files to us, it is your responsibility to use a secure encrypted connection to communicate with and use the Web Services. Your use of the Web Services is at your sole risk and is subject to any terms of use applicable to such Web Services are included in the definition of Services above.
- 15. Confidentiality. We will not disclose your information obtained in confidence ("Confidential Information") to third parties, except our subsidiaries, affiliates, or subcontractors, without your prior written authorization. Confidential Information will not include information: (a) already known to us, (b) publicly available, (c) subsequently acquired by us from other sources without a breach of these Terms and Conditions, (d) disclosure that is necessary to perform the Services, (e) required to be produced by law or government order, or accreditation authority, or (f) related to a product bearing a UL Mark that should be disclosed to us or our affiliates pursuant to another agreement with you.
- 16. Samples. If we require sample examination, you will ship samples to us at your expense. Upon completion of testing, the samples will be destroyed, unless other arrangements are made for return of the samples at your expense. You acknowledge that testing and sample preparation may damage or destroy the sample(s), for which we will not be liable.
- 17. LIMITATION OF LIABILITY. OUR LIABILITY FOR ANY CLAIMS FOR LOSS, DAMAGE, OR EXPENSE OF ANY NATURE AND HOWSOEVER ARISING FOR ANY BREACH OF CONTRACT AND/OR ANY FAILURE TO EXERCISE APPROPRIATE SKILL AND CARE BY US WILL UNDER NO CIRCUMSTANCE EXCEED THE FEES RECEIVED FOR THE SPECIFIC SERVICES WHICH GIVE RISE TO SUCH CLAIMS, UNDER NO CIRCUMSTANCE WILL WE HAVE ANY LIABILITY FOR ANY CLAIMS FOR INDIRECT, CONSEQUENTIAL, INCIDENTAL, SPECIAL, EXEMPLARY, OR PUNITIVE DAMAGES OF ANY NATURE WHATSOEVER, INCLUDING BUT NOT LIMITED TO: LOSS OF PROFITS, GOODWILL, USE, DATA, FUTURE BUSINESS, OR PRODUCTION; CANCELLATION OF CONTRACTS ENTERED INTO BY YOU; OR OTHER INTANGIBLE LOSSES (EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES). UNDER NO CIRCUMSTANCE WILL WE BE LIABLE TO YOU FOR ANY CLAIMS FOR LOSS, DAMAGE, OR EXPENSE UNLESS SUCH CLAIM IS BROUGHT UNDER SECTION 24 (DISPUTES) WITHINIT TWELVE MONTHS AFTER THE DATE OF THE PERFORMANCE BY US OF THE SERVICES WHICH GIVE RISE TO THE CLAIM OR, IN THE EVENT OF ANY ALLEGED NON-PERFORMANCE, WITHIN TWELVE MONTHS OF THE DATE WHEN SUCH SERVICES SHOULD HAVE BEEN COMPLETED.
- 18. Indemnification. You will defend, hold harmless, and indemnify us and our officers, directors, trustees, employees, agents, or subcontractors against all claims made by any third party for loss, damage, or expense arising out of these Terms and Conditions, including without limitation, the performance or non-performance of any Services or the Web Services.
- 19. Waiver. Any failure by a party to insist upon the performance of any section of these Terms and Conditions will not constitute a waiver of any rights under these Terms and Conditions or future performance of that section.
- 20. No Third Party Beneficiaries. The parties intend that no provisions of these Terms and Conditions will in any way bind or benefit any third party or the public at large and that no third party will have any rights or cause of action under these Terms and Conditions. In particular, in the event Singapore law governs these Terms and Conditions pursuant to Section 23 (Governing Law), a person or entity who is not a party to these Terms and Conditions will have no right under the Contracts (Rights of Third Parties) Act (Chapter 53B) to enforce any term of these Terms and Conditions, regardless of whether such person or entity has been identified by name, as a member of a class, or as answering a particular description.
- 21. No Assignment. Neither party may assign any of its rights or obligations under these Terms and Conditions to any other person without the other party's written authorization. However, we may, upon written notice, assign our rights and obligations under these Terms and Conditions to any of our affiliates or subsidiaries.
- 22. Subcontracting. We may use subcontractors for certain testing or other Services. All subcontractors will meet our current qualification requirements and will comply with our requirements for confidentiality, conflicts of interest, and ethical standards.
- 23. Termination and Notice. These Terms and Conditions will continue in effect until terminated by either party upon thirty days written notice or, in the event of your breach of these Terms and Conditions, immediately upon receipt of written notice to you. You will pay those fees and expenses incurred by us prior to termination. Notice to either party may be made by hand delivery, courier service, mail, facsimile, or e-mail transmission at the receiving party's designated principal place of business. Notice to us must be sent both to: UL Verification Services Pte. Ltd, Attn: President, 1 Maritime Square, Harbour Front Centre, #11-03, Singapore 099253 with a copy to UL LLC, Attn: General Counsel at 333 Pfingsten Road, Northbrook, Illinois 60062. Notice will be effective upon receipt.
- 24. Governing Law: These Terms and Conditions will be governed and interpreted by the laws of the State of Illinois, United States of America, except if: (i) UL Contracting Party's principal place of business is Asia, Australia, or New Zealand, then Singapore law, and (ii) UL Contracting Party's principal place of business is Europe, then Swiss law, without reference to the applicable jurisdiction's choice of law principles.
- 25. Disputes. Any dispute or disagreement, other than nonpayment of fees, relating to these Terms and Conditions or the Services, will be settled by confidential, binding arbitration administered by the International Centre for Dispute Resolution of the American Arbitration Association ("AAA") pursuant to the AAA Commercial Arbitration Rules and the Procedures for Large, Complex Commercial Disputes. The arbitration we will be Chicago, Illinois, except if: (i) UL Contracting Party's principal place of business is in Asia, Australia, or New Zealand, the venue will be forea, Switzerland, and (ii) UL Contracting Party's principal place of business is in Asia, Australia, or New Zealand, the venue will be forea, Switzerland, and (ii) UL Contracting Party's principal place of business is in Asia, Australia, or New Zealand, the venue will be Singapore. Republic of Singapore. The arbitration will be conducted before a panel of three (3) arbitrators. The arbitration panel will be selected as follows: the parties will request a list of ten (10) arbitrators drawn from the AAA's panel of commercial arbitrators (who are experienced in and familiar with the AAA's Procedures for Large, Complex Commercial Disputes). From this list, both parties will expense arbitrator. After they have been notified of their panel selection, the two (2) arbitrators will agree on a third arbitrator from the list of ten (10), who will be the chair of the panel, and the panel will be final. The decision of the majority of the arbitrators will be the panel and the panel will be final. The decision of the majority of the arbitrators will be the panel and the panel will be final. The decision of the majority of the arbitrators will be the chair of ten (10), who will be the chair of the panel, and the panel will be final. The decision of the majority of the arbitrators will be remained arbitrators will be the chair of the panel, and the panel will be final. The decision of the majority of the majority of the arbitrators will be remained arbitrators wil
- 26. Severability. If any section of these Terms and Conditions is held invalid, void, or unenforceable for any reason that section will be severed, and all other sections of these Terms and Conditions will remain valid to the extent permissible under law.
- 27. Modifications. These Terms and Conditions are the entire and complete agreement between the parties and supersede any other communications, representations, or agreements with respect to its subject matter. Under no circumstances will any preprinted, additional, or different terms and conditions on your requests for quotation, purchase orders, invoices, sales or marketing materials, emails, any acceptance communications, or other business documents apply to any Services or Quotation or bind us in any manner. Modifications that have not been made by us or that have not been accepted by us in a written or emailed confirmation from us are not accepted by us, and commencement of performance will not signify acceptance by us of any such modifications. Any such modifications are excluded from our agreement, and such modifications will not be a binding agreement on us.
- 28. Order of Precedence. Except for conflicts with Section 2 (Payment Terms), Section 4 (Estimated Schedule and Price) and Section 9 (Cancellation Fees), these Terms and Conditions will take precedence over any conflicting
- 29. Electronic Signature. These Terms and Conditions may be executed and delivered by facsimile, PDF, or by means of other electronic signature. Our electronic, digital, or hard copies of these Terms and Conditions, your acceptance, and Quotations as signed, or otherwise accepted, by you will be the true, complete, valid, authentic, and enforceable copies of these documents. You agree that you will not contest the admissibility or enforceability of our copies in a court or any proceeding arising out of such documents.
- 30. Force Majeure. Neither party will be liable for any failure or delay in the performance of its obligations due to fire, flood, earthquake, elements of nature, or acts of God, acts of war, terrorism, riots, civil disorder, rebellions, or other similar cause beyond the reasonable control of the party affected, provided such default or delay; (i) could not have been prevented by reasonable precautions; (ii) cannot reasonably be circumvented; (iii) and the party hindered or delayed immediately notifies the other party describing the circumstance causing delay.