

Applicant	Ashutosh Rubber Pvt. Ltd. 2516, Lodhika GIDC Industrial Estate, Inside First Gate, H-1 Road, Metoda, Kalawad Road, Rajkot, Gujarat – 360021. India.				
Attention	: Mr. Premji Fufal				
Tested Sample	: Received on 23.03.2017				
Test Period	: 23.03.2017 to 04.04.2017				
Sample Description	Sample A: PHE STAR FRC – 180MM COUPLING ELEMENT				
Drawing No.	: L338				
Material Details	NITRILE POLYMER				
Buyer Name	: SKF				
Supplier Name	: Ashutosh Rubber Pvt. Ltd.				
Purpose of Examination	 Analysis of the 173 substances of very high concern (SVHC) on the Candidate List for authorization, concerning REACH Regulation (EC) No. 1907/2006 as published on the European Chemicals Agency (ECHA) website in October 2008 January 2010, March 2010, June 2010, December 2010, June 2011, December 2011, June 2012, December 2012, June 2013, December 2013, June 2014, December 2014, June 2015, Dec 2015 June 2016 and Jan 2017 as per applicant's reguisition. 				

Note: The submitted sample is Not Drawn by the Laboratory.

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Prepared by

Sanjay Kumar Das Report Reviewer

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For any complaint : Saikiran Koyalkar at saikiran.koyalkar@tuv-sud.in. By accepting this document the customer hereby agrees and accepts the Terms & Conditions' and the relevant 'Testing & Certification Regulations' of TÜV SÜD South Asia Pvt. Ltd. which are available at Company's website at the link-<u>http://www.tuv-sud.in/in-en/resource-centre/terms-and-conditions</u> Note: The test report is electronically generated. Hence original signature is not required.

Note: (1) General Terms & Conditions as mentioned overleaf, (2) The results relate only to the items tested, (3) The test report shall not be reproduced except in full without the written approval of the laboratory(4) For details of the accredited scope please contact the laboratory or visit <u>www.nabl-india.org</u>

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TEST RESULTS AND CONCLUSION:

Analysis of the 173 substances of very high concern (SVHC) on the Candidate List for authorization, concerning REACH Regulation (EC) No. 1907/2006 as published on the European Chemicals Agency (ECHA) website in October 2008, January 2010, March 2010, June 2010, December 2010, June 2011, December 2011, June 2012, December 2012, June 2013, December 2013, June 2014, December 2014,June 2015, December 2015, June 2016 and Jan 2017.

Analysis based on LCMS, GCMS, Headspace-GCMS, UPLC, ICP-OES and UV-VIS.

Requirement Limits: All individual parameters = <0.1%

S.No.	Substance Name	CAS Number	LOQ (%)	Result (%)	Conclusion
1	Anthracene	120-12-7	0.005	<0.005	Pass
2	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8	0.01	<0.01	Pass
3	4,4'- Diaminodiphenylmethane (MDA)	101-77-9	0.005	<0.005	Pass
4	Dibutyl phthalate (DBP)	84-74-2	0.01	<0.01	Pass
5	Sodium dichromate	7789-12-0, 10588-01-9	0.005	<0.00 <mark>5</mark>	Pass
6	Diarsenic pentaoxide	1303-28-2	0.005	<0.005	Pass
7	Triethyl arsenate	15606-95-8	0.005	<0.005	Pass
8	Bis(tributyltin)oxide (TBTO)	56-35-9	0.005	< 0.005	Pass
9	Diarsenic trioxide	1327-53-3	0.005	<0.00 <mark>5</mark>	Pass
10	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	0.005	<0.00 <mark>5</mark>	Pass
11	Bis (2-ethylhexyl)phthalate (DEHP)	117-81-7	0.01	<0.01	Pass
12	Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha- hexabromocyclododecane Beta- hexabromocyclododecane Gamma- hexabromocyclododecane	25637-99-4, 3194-55-6 (134237-50-6) (134237-51-7) (134237-52-8)	0.005	<0.005	Pass
13	Benzyl butyl phthalate (BBP)	85-68-7	0.01	<0.01	Pass
14	Lead hydrogen arsenate	7784-40-9	0.005	<0.005	Pass
15	Anthracene oil, anthracene paste, distn. lights	91995-17-4	0.005	<0.005	Pass
16	Pitch, coal tar, high temp.	65996-93-2	0.005	<0.005	Pass
17	Anthracene oil, anthracene paste	90640-81-6	0.005	<0.005	Pass
18	Lead chromate	7758-97-6	0.005	<0.005	Pass
19	Diisobutyl phthalate	84-69-5	0.01	<0.01	Pass
20	Tris(2-chloroethyl)phosphate	115-96-8	0.005	<0.005	Pass
21	Anthracene oil, anthracene-low	90640-82-7	0.005	<0.005	Pass
22	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2	0.005	<0.005	Pass
23	2,4-Dinitrotoluene	121-14-2	0.005	<0.005	Pass



S.No.	Substance Name	CAS Number	LOQ (%)	Result (%)	Conclusion
24	Anthracene oil	90640-80-5	0.005	<0.005	Pass
25	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	12656-85-8	0.005	<0.005	Pass
26	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	1344-37-2	0.005	<0.005	Pass
27	Acrylamide	79-06-1	0.005	<0.005	Pass
28	Potassium chromate	7789-00-6	0.005	<0.005	Pass
29	Disodium tetraborate, anhydrous	1303-96-4, 1330- 43-4, 12179-04-3	0.005	<0.005	Pass
30	Sodium chromate	7775-11-3	0.005	<0.005	Pass
31	Boric acid	10043-35-3, 11113-50-1	0.005	<0.005	Pass
32	Ammonium dichromate	7789-09-5	0.005	<0.005	Pass
33	Tetraboron disodium heptaoxide, hydrate	12267-73-1	0.005	<0.005	Pass
34	Potassium dichromate	7778-50-9	0.005	<0.005	Pass
35	Trichloroethylene	79-01-6	0.005	<0.005	Pass
36	Cobalt(II) dinitrate*	10141-05-6	0.005	<0.005	Pass
37	Cobalt(II) carbonate*	513-79-1	0.005	<0.005	Pass
38	Chromium trioxide*	1333-82-0	0.005	<0.005	Pass
39	2-Methoxyethanol	109-86-4	0.005	<0.005	Pass
40	Acids generated from chromium trioxide and their oligomers. Names of the acids and their oligomers: Chromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid.	7738-94-5, 13530-68-2	0.005	<0.005	Pass
41	2-Ethoxyethanol	110-80-5	0.005	< 0.005	Pass
42	Cobalt(II) sulphate*	10124-43-3	0.005	<0.005	Pass
43	Cobalt(II) diacetate*	71-48-7	0.005	<0.005	Pass
44	Hydrazine	302-01-2, 7803- 57-8	0.005	<0.005	Pass
45	2-Ethoxyethyl acetate	111-15-9	0.005	<0.005	Pass
46	1,2,3-Trichloropropane	96-18-4	0.005	<0.005	Pass
47	1-Methyl-2-pyrrolidone	872-50-4	0.005	<0.005	Pass
48	Strontium chromate	7789-06-2	0.005	<0.005	Pass
49	1,2-Benzenedicarboxylic acid, di-C7-11- branched and linear alkyl esters	68515-42-4	0.01	<0.01	Pass
50	1,2-Benzenedicarboxylic acid, di-C6-8- branched alkyl esters, C7-rich	71888-89-6	0.01	<0.01	Pass
51	Cobalt dichloride	7646-79-9	0.005	<0.005	Pass
52	2,2'-dichloro-4,4'-methylenedianiline	101-14-4	0.005	<0.005	Pass
53	Bis(2-methoxyethyl) ether	111-96-6	0.005	<0.005	Pass



S.No.	Substance Name	CAS Number	LOQ (%)	Result (%)	Conclusion
54	Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium and silicon are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (μ m) c) alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content less or equal to 18% by weight ⁽¹⁾		0.005	<0.005	Pass
55	Bis(2-methoxyethyl) phthalate	117-82-8	0.01	<0.01	Pass
56	Zirconia Aluminosilicate Refractory Ceramic Fibres are fibres covered by index number 650-017-00-8 in Annex VI, part 3, table 3.1 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, and fulfil the three following conditions: a) oxides of aluminium, silicon and zirconium are the main components present (in the fibres) within variable concentration ranges b) fibres have a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometres (μ m). c) alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content less or equal to 18% by weight(1)	UD.	0.005	<0.005	Pass
57	Trilead diarsenate	3687-31-8	0.005	<0.005	Pass
58	Lead styphnate	15245-44-0	0.005	<0.005	Pass
59	Formaldehyde, oligomeric reaction products with aniline	25214-70-4	0.005	<0.005	Pass
60	Potassium hydroxyoctaoxodizincatedichromate	11103-86-9	0.005	<0.005	Pass
61	Arsenic acid	7778-39-4	0.005	<0.005	Pass
62	Pentazinc chromate octahydroxide	49663-84-5	0.005	<0.005	Pass
63	2-Methoxyaniline; o-Anisidine	90-04-0	0.005	<0.005	Pass



S.No.	Substance Name	CAS Number	LOQ (%)	Result (%)	Conclusion
64	Dichromium tris(chromate)	24613-89-6	0.005	<0.005	Pass
65	Calcium arsenate	7778-44-1	0.005	<0.005	Pass
66	1,2-dichloroethane	107-06-2	0.005	<0.005	Pass
67	Lead dipicrate	6477-64-1	0.005	<0.005	Pass
68	Lead diazide, Lead azide	13424-46-9	0.005	<0.005	Pass
69	Phenolphthalein	77-09-8	0.005	<0.005	Pass
70	N,N-dimethylacetamide	127-19-5	0.005	<0.005	Pass
71	4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	0.005	<0.005	Pass
72	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	0.005	<0.005	Pass
73	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5- triazinane-2,4,6-trione (TGIC)	2451-62-9	0.005	<0.005	Pass
74	[4-[[4-anilino-1-naphthyl]][4- (dimethylamino)phenyl]methylene]cyclo hexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [with $\ge 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	2580-56-5	0.005	<0.005	Pass
75	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	0.005	<0.00 <mark>5</mark>	Pass
76	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1- ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with $\ge 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	548-62-9	0.005	<0.005	Pass
77	Formamide	75-12-7	0.005	<0.005	Pass
78	Lead(II) bis(methanesulfonate)	17570-76-2	0.005	<0.005	Pass
79	4,4'-bis(dimethylamino)-4"- (methylamino)trityl alcohol [with $\ge 0.1\%$ of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	561-41-1	0.005	<0.005	Pass
80	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	0.005	<0.005	Pass
81	Diboron trioxide*	1303-86-2	0.005	<0.005	Pass
82	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]- 1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	59653-74-6	0.005	<0.005	Pass
83	N,N,N',N'-tetramethyl-4,4'- methylenedianiline (Michler's base)	101-61-1	0.005	<0.005	Pass



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S.No.	Substance Name	CAS Number	LOQ (%)	Result (%)	Conclusion
84	α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with ≥ 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	6786-83-0	0.005	<0.005	Pass
85	Lead cyanamidate*	20837-86-9	0.005	<0.005	Pass
86	Sulfurous acid, lead salt, dibasic*	62229-08-7	0.005	<0.005	Pass
87	Diazene-1,2-dicarboxamide (C,C'- azodi(formamide))	123-77-3	0.01	<0.01	Pass
88	Fatty acids, C16-18, lead salts	91031-62-8	0.005	<0.005	Pass
89	Diisopentylphthalate	605-50-5	0.01	<0.01	Pass
90	Biphenyl-4-ylamine	92-67-1	0.005	<0.005	Pass
91	Orange lead (lead tetroxide)	1314-41-6	0.005	<0.005	Pass
92	4,4'-oxydianiline and its salts	101-80-4	0.005	<0.005	Pass
93	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	0.01	<0.01	Pass
94	o-aminoazotoluene	97-56-3	0.005	<0.005	Pass
95	Trilead dioxide phosphonate*	12141-20-7	0.005	<0.005	Pass
96	Methyloxirane (Propylene oxide)	75-56-9	0.005	<0.005	Pass
97	4-methyl-m-phenylenediamine (toluene- 2,4-diamine)	95-80-7	0.005	<0.005	Pass
98	Methoxyacetic acid	625-45-6	0.005	<0.00 <mark>5</mark>	Pass
99	1-bromopropane (n-propyl bromide)	106-94-5	0.005	<0.00 <mark>5</mark>	Pass
100	Heptacosafluorotetradecanoic acid	376-06-7	0.005	<0.00 <mark>5</mark>	Pass
101	Tricosafluorododecanoic acid	307-55-1	0.005	<0.005	Pass
102	Pentacosafluorotridecanoic acid	72629-94-8	0.005	<0.005	Pass
103	Pentalead tetraoxide sulphate*	12065-90-6	0.005	<0.005	Pass
104	Tetraethyllead*	78-00-2	0.005	<0.005	Pass
105	Dioxobis(stearato)trilead	12578-12-0	0.005	<0.005	Pass
106	N-pentyl-isopentylphthalate	776297-69-9	0.01	<0.01	Pass
107	Tetralead trioxide sulphate*	12202-17-4	0.005	<0.005	Pass
108	1,2-Diethoxyethane	629-14-1	0.005	<0.005	Pass
109	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7	0.005	<0.005	Pass
110	N-methylacetamide	79-16-3	0.005	<0.005	Pass
111	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	1163-19-5	0.005	<0.005	Pass
112	[Phthalato(2-)]dioxotrilead	69011-06-9	0.005	<0.005	Pass
113	Acetic acid, lead salt, basic	51404-69-4	0.005	<0.005	Pass
114	Lead titanium trioxide*	12060-00-3	0.005	<0.005	Pass
115	Lead oxide sulphate*	12036-76-9	0.005	<0.005	Pass



S.No.	Substance Name	CAS Number	LOQ (%)	Result (%)	Conclusion
116	Dimethyl sulphate*	77-78-1	0.005	<0.005	Pass
117	Diethyl sulphate*	64-67-5	0.005	<0.005	Pass
118	4,4'-methylenedi-o-toluidine	838-88-0	0.005	<0.005	Pass
119	4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, covering also UVCB- and well-defined substances which include any of the individual isomers or a combination thereof]	-	0.005	<0.005	Pass
120	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	-	0.005	<0.005	Pass
121	N,N-dimethylformamide	68-12-2	0.005	< 0.005	Pass
122	Furan	110-00-9	0.005	< 0.005	Pass
123	Trilead bis(carbonate)dihydroxide*	1319-46-6	0.005	< 0.005	Pass
124	Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD); the substance is a member of the group entry of lead compounds, with index number 082- 001-00-6 in Regulation (EC) No 1272/2008]	68784-75-8	0.005	<0.005	Pass
125	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3- oxazolidine	143860-04-2	0.005	<0.005	Pass
126	o-Toluidine	95-53-4	0.005	<0.005	Pass
127	Lead monoxide (lead oxide)*	1317-36-8	0.005	<0.005	Pass
128	Lead titanium zirconium oxide*	12626-81-2	0.005	<0.005	Pass
129	4-Aminoazobenzene	60-09-3	0.005	<0.005	Pass
130	Silicic acid, lead salt*	11120-22-2	0.005	<0.005	Pass
131	Lead dinitrate*	10099-74-8	0.005	<0.005	Pass
132	Lead bis(tetrafluoroborate)*	13814-96-5	0.005	<0.005	Pass
133	Dibutyltin dichloride (DBTC)	683-18-1	0.005	<0.005	Pass
134	Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2- dicarboxylic anhydride [3] [The individual cis- [2] and trans- [3] isomer substances and all possible combinations of the cis- and trans- isomers [1] are covered by this entry]	85-42-7, 13149- 00-3, 14166-21-3	0.01	<0.01	Pass



S.No.	Substance Name	CAS Number	LOQ (%)	Result (%)	Conclusion
135	Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3- methylphthalic anhydride [4] [<i>The</i> <i>individual isomers</i> [2], [3] and [4] (<i>including their cis- and trans- stereo</i> <i>isomeric forms</i>) and all possible combinations of the isomers [1] are covered by this entry]	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	0.01	<0.01	Pass
136	Henicosafluoroundecanoic acid	2058-94-8	0.005	<0.005	Pass
137	6-methoxy-m-toluidine (p-cresidine)	120-71-8	0.005	<0.005	Pass
138	Pyrochlore, antimony lead yellow	8012-00-8	0.005	<0.005	Pass
139	Cadmium	7440-43-9	0.005	<0.005	Pass
140	Cadmium oxide*	1306-19-0	0.005	< 0.005	Pass
141	Dipentyl phthalate (DPP)	131-18-0	0.01	< 0.01	Pass
142	4-Nonylphenol, branched and linear, ethoxylated [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB- and well-defined substances, polymers and homologues, which include any of the individual isomers and/or combinations thereof]	JV	0.005	<0.005	Pass
143	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	0.005	<0.00 <mark>5</mark>	Pass
144	Pentadecafluorooctanoic acid (PFOA)		0.005	< 0.005	Pass
145	Cadmium sulphide*	1306-23-6	0.005	< 0.005	Pass
146	Disodium 3,3'-[[1,1'-biphenyl]-4,4'- diylbis(azo)]bis(4-aminonaphthalene-1- sulphonate)(C.I. Direct Red 28)	573-58-0	0.005	<0.005	Pass
147	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	0.005	<0.005	Pass
148	Dihexyl phthalate	84-75-3	0.01	<0.01	Pass
149	Imidazolidine-2-thione (2-imidazoline-2- thiol)	96-45-7	0.005	<0.005	Pass
150	Lead di(acetate)*	301-04-2	0.005	<0.005	Pass
151	Trixylyl phosphate*	25155-23-1	0.005	<0.005	Pass
152	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	0.01	<0.01	Pass
153	Sodium perborate; perboric acid, sodium salt*	-	0.005	<0.005	Pass
154	Sodium peroxometaborate*	4-4-7632	0.005	<0.005	Pass
155	Cadmium chloride*	10108-64-2	0.005	<0.005	Pass



S.No.	Substance Name	CAS Number	LOQ (%)	Result (%)	Conclusion
156	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo- 8-oxa-3,5-dithia-4- stannatetradecanoate (DOTE)	15571-58-1	0.005	<0.005	Pass
157	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)	-	0.005	<0.005	Pass
158	Cadmium fluoride*	7790-79-6	0.005	<0.005	Pass
159	Cadmium sulphate*	10124-36- 4:31119-53-6	0.005	<0.005	Pass
160	2-benzotriazol-2-yl-4,6-di-tert- butylphenol (UV-320)	3846-71-7	0.005	<0.005	Pass
161	2-(2H-benzotriazol-2-yl)-4,6- ditertpentylphenol (UV-328)	25973-55-1	0.005	<0.005	Pass
162	1,2-benzenedicarboxylic acid, di-C6-10- alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with $\ge 0.3\%$ of dihexyl phthalate (EC No. 201-559-5)	68515-51-5; 68648-93-1	0.01	<0.01	Pass
163	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] [covering any of the individual isomers of [1] and [2] or any combination thereof]	ÜD	0.005	<0.005	Pass
164	1,3-propanesultone	1120-71-4	0.005	< 0.005	Pass
165	2,4-di-tert-butyl-6-(5-chlorobenzotriazol- 2-yl)phenol (UV-327)	3864-99-1	0.005	<0.005	Pass
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6- (sec-butyl)phenol (UV-350)	36437-37-3	0.005	<0.005	Pass
167	Nitrobenzene	98-95-3	0.005	<0.005	Pass
168	Perfluorononan-1-oic acid (2,2,3,3,4,4,5,5,6,6,7,7,8,8,9,9,9- heptadecafluorononanoic acid and its sodium and ammonium salts	375-95-1; 21049-39-8; 4149-60-4	0.005	<0.005	Pass
169	Benzo(a)Pyrene	50-32-8	0.005	<0.005	Pass
170	4,4'-isopropylidenediphenol (bisphenol A)	80-05-7	0.005	<0.005	Pass
171	p-(1,1-dimethylpropyl)phenol	80-46-6	0.005	<0.005	Pass
172	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	3108-42-7;335- 76-2;383-45-3	0.005	<0.005	Pass



173	4-heptylphenol, branched and linear [substances with a linear and / or branched alkyl chain with a carbon number of 7 covalently bound predominantly in position 4 to phenol, covering also UVCB-and well-defined substances which include any of the individual isomers or a combination therof]	-	0.005	<0.005	Pass
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Sample Digital Photographs



Note :

LOQ = Limit of quantification. All LOQ are based on homogenous material.

LOQ = 0.005% is evaluated for element (i.e. cobalt, arsenic, lead, Cadmium, sodium, chromium, chromium (VI), silicon, aluminum, zirconium, boron, potassium ,and molybdenum .

Bis(tributyltin)oxide (TBTO) is tested and calculated in term of Tributyl tin.

The substances are UVCB (substance of unknown or variable composition, complex reaction products or biological materials), which are identified by its main constituents.

Individual concentrations to the constituent of UVCB with an amount of < 0.005% were not considered by the calculation of the sum.

⁽¹⁾ The test result is based on microscopic and chemical evaluation.



* For the substances concentrations are calculated on the basis of total metal content (Pb, Cd, Co, Ti, Zr, Mo, Al, Cr, Ba, B, As, Ca, Zn, K, Sr).

By calculation, if detected, this material probably contains Boric acid (CAS: 10043-35-3/11113-50-1), Disodium tetraborate, anhydrous (CAS: 1330-43-4/12179-04-3/1303-96-4), or Tetraboron disodium heptaoxide hydrate (CAS: 12267-73-1). The calculation is based on the total boron content by ICP-OES.It suggests to check the respective recipe. If the theoretical content of the respective substance is >0.1% in the weight of whole article.

Calculated concentrations of cobalt(II) sulphate, cobalt(II) dinitrate, cobalt(II) carbonate, cobalt(II) diacetate are based on the total cobalt by ICP-OES.

Calculated concentrations of Sodium dichromate, potassium dichromate, chromium trioxide, chromic acid and dichromic acid are based on the identified chromium(VI) by UV-VIS Spectrophotometer.

The tested material(s) was analyzed for relevant SVHC substance(s) only as the additional risk for other SVHC substances is low in the tested material(s). The testing is focused on the possibility of contamination during production & material specific contamination of the product.



-- END OF THE TEST REPORT --