



Technical Report No.68.434.17.0034.02A
Dated 2017-10-30

Client: _____
Address: _____
Attn.: Ms. Lisa Chan
Sample Description: Rubber floor
Model No.: /
Supplier: _____
Country of origin: CHINA
Exported to: Europe
Details of Submitted Sample: Refer to following page(s)
Sample Receive Date: 2017-10-11
Test Period: From 2017-10-11 to 2017-10-19
Test Requested: REACH Regulation (EC) No. 1907/2006
- 174 Substances of Very High Concern (SVHC) analysis based on the Candidate List 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, January 2017 and July 2017
Test Result: Refer to following page(s)
Summary: According to the specified scope and analytical techniques, the concentration of each of the 174 SVHC is <0.1% (w/w) in the component(s) of submitted product(s).
Remark: - The result(s) relates only to the item(s) tested.
- This report supersedes previous report 68.434.17.0034.01A issued on 2017-10-27.

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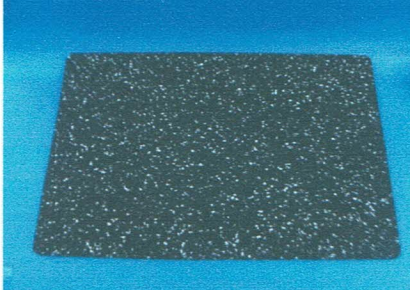
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Technical Report No.68.434.17.0034.02A
Dated 2017-10-30

1. TESTED SUBJECT DESCRIPTION

Sample Number	Tested Item Description	Photo
001	Black rubber with white speckle	





Technical Report No.68.434.17.0034.02A
Dated 2017-10-30

2. TEST RESULTS

Test method: Screening test, analyzed based on Liquid Chromatography Mass Spectrometry (LC-MS), Gas Chromatography and Mass Spectrometry (GC-MS), headspace GC-MS, Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES), UV-Vis spectrophotometer and X-Ray Fluorescence Sptrometer (XRF). [Reporting limit: 0.01%]

Test Item(s)	Result[%]
	Sample 001
Each of 174 substances of very high concern (SVHCs)*	< 0.01

Note:

- “%” denotes percent by weight
- “<” denotes less than
- “*” refer to APPENDIX I for detailed list of SVHCs
- As per article 33 of the REACH regulation (EC No. 1907/2006), recipients of article must be provided with information of safe use if any of the tested substances exceeded 0.1% (w/w).



TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
TÜV SÜD Group

Prepared by:

Jason Peng
Project Handler



Reviewed by:

Vic Wei
Designated Reviewer



Technical Report No.68.434.17.0034.02A
Dated 2017-10-30

APPENDIX I - 174 SUBSTANCES OF VERY HIGH CONCERN (SVHCs)

1. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN OCTOBER 2008 BY ECHA

Substance Name	CAS NO.	EC NO.
Anthracene	120-12-7	204-371-1
4,4'- Diaminodiphenylmethane (MDA)	101-77-9	202-974-4
Dibutyl phthalate (DBP)	84-74-2	201-557-4
Cobalt dichloride*	7646-79-9	231-589-4
Diarsenic pentaoxide*	1303-28-2	215-116-9
Diarsenic trioxide*	1327-53-3	215-481-4
Sodium dichromate*	7789-12-0 and 10588-01-9	234-190-3
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2	201-329-4
Bis (2-ethylhexyl) phthalate (DEHP)	117-81-7	204-211-0
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha-HBCDD, Beta-HBCDD, Gamma-HBCDD	25637-99-4 and 3194-55-6 (134237-50-6, 134237-51-7, 134237-52-8)	247-148-4 and 221-695-9
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) (SCCP)	85535-84-8	287-476-5
Bis(tributyltin)oxide (TBTO)*	56-35-9	200-268-0
Lead hydrogen arsenate*	7784-40-9	232-064-2
Benzyl butyl phthalate (BBP)	85-68-7	201-622-7
Triethyl arsenate*	15606-95-8	427-700-2



Technical Report No.68.434.17.0034.02A
Dated 2017-10-30

2. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JANUARY 2010 AND MARCH 2010 BY ECHA

Substance Name	CAS NO.	EC NO.
Anthracene oil [#]	90640-80-5	292-602-7
Anthracene oil, anthracene paste, distn. lights [#]	91995-17-4	295-278-5
Anthracene oil, anthracene paste, anthracene fraction [#]	91995-15-2	295-275-9
Anthracene oil, anthracene-low [#]	90640-82-7	292-604-8
Anthracene oil, anthracene paste [#]	90640-81-6	292-603-2
Pitch, coal tar, high temp [#]	65996-93-2	266-028-2
2,4-Dinitrotoluene	121-14-2	204-450-0
Diisobutyl phthalate (DIBP)	84-69-5	201-553-2
Tris(2-chloroethyl)phosphate	115-96-8	204-118-5
Lead chromate*	7758-97-6	231-846-0
Lead sulfochromate yellow (C.I. Pigment Yellow 34)*	1344-37-2	215-693-7
Lead chromate molybdate sulphate red (C.I. Pigment Red 104)*	12656-85-8	235-759-9
Acrylamide	79-06-1	201-173-7



Technical Report No.68.434.17.0034.02A
Dated 2017-10-30

3. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2010 BY ECHA

Substance Name	CAS NO.	EC NO.
Trichloroethylene	79-01-6	201-167-4
Boric acid*	10043-35-3 11113-50-1	233-139-2 234-343-4
Disodium tetraborate, anhydrous*	1330-43-4 12179-04-3 1303-96-4	215-540-4
Tetraboron disodium heptaoxide, hydrate*	12267-73-1	235-541-3
Sodium chromate*	7775-11-3	231-889-5
Potassium chromate*	7789-00-6	232-140-5
Ammonium dichromate*	7789-9-5	232-143-1
Potassium dichromate*	7778-50-9	231-906-6

4. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN DECEMBER 2010 BY ECHA

Substance Name	CAS NO.	EC NO.
Cobalt(II) sulphate*	10124-43-3	233-334-2
Cobalt(II) dinitrate*	10141-05-6	233-402-1
Cobalt(II) carbonate*	513-79-1	208-169-4
Cobalt(II) diacetate*	71-48-7	200-755-8
2-Methoxyethanol	109-86-4	203-713-7
2-Ethoxyethanol	110-80-5	203-804-1
Chromium trioxide*	1333-82-0	215-607-8
Acids generated from chromium trioxide and their oligomers*	7738-94-5 13530-68-2 not yet assigned	231-801-5 236-881-5 not yet assigned

5. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2011 BY ECHA

Substance Name	CAS NO.	EC NO.
2-Ethoxyethyl acetate (2-EEA)	111-15-9	203-839-2
Strontium chromate*	7789-06-2	232-142-6
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)#	68515-42-4	271-084-6
Hydrazine	7803-57-8, 302-01-2	206-114-9
1-Methyl-2-pyrrolidone	872-50-4	212-828-1
1,2,3-Trichloropropane	96-18-4	202-486-1
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	276-158-1



Technical Report No.68.434.17.0034.02A
Dated 2017-10-30

6. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN DECEMBER 2011 BY ECHA

Substance Name	CAS NO.	EC NO.
1,2-Dichloroethane	107-06-2	203-458-1
2,2'-Dichloro-4,4'-methylenedianiline (MOCA)	101-14-4	202-918-9
2-Methoxyaniline, o-Anisidine	90-04-0	201-963-1
4-(1,1,3,3-Tetramethylbutyl)phenol, (4-tert-Octylphenol)	140-66-9	205-426-2
Aluminosilicate Refractory Ceramic Fibres (RCF)	--	---
Arsenic acid*	7778-39-4	231-901-9
Bis(2-methoxyethyl) ether	111-96-6	203-924-4
Bis(2-methoxyethyl) phthalate	117-82-8	204-212-6
Calcium arsenate*	7778-44-1	231-904-5
Dichromium tris(chromate) *	24613-89-6	246-256-2
Formaldehyde, oligomeric reaction products with aniline (technical MDA) #	25214-70-4	500-036-1
Lead diazide*	13424-46-9	236-542-1
Lead dipicrate*	6477-64-1	229-335-2
Lead styphnate*	15245-44-0	239-290-0
N,N-dimethylacetamide (DMAC)	127-19-5	204-826-4
Pentazinc chromate octahydroxide*	49663-84-5	256-418-0
Phenolphthalein	77-09-8	201-004-7
Potassium hydroxyoctaoxodizincatedichromate*	11103-86-9	234-329-8
Trilead diarsenate*	3687-31-8	222-979-5
Zirconia Aluminosilicate Refractory Ceramic Fibres (Zr-RCF) *	--	---



Technical Report No.68.434.17.0034.02A
Dated 2017-10-30

7. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2012 BY ECHA

Substance Name	CAS NO.	EC NO.
1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	112-49-2	203-977-3
1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	110-71-4	203-794-9
Diboron trioxide*	1303-86-2	215-125-8
Formamide	75-12-7	200-842-0
Lead(II) bis(methanesulfonate)*	17570-76-2	401-750-5
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (TGIC)	2451-62-9	219-514-3
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	423-400-0
4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8	202-027-5
N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1	202-959-2
[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26) [with \geq 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	2580-56-5	219-943-6
[4-[4,4'-bis(dimethylamino)benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) [with \geq 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	548-62-9	208-953-6
4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol [with \geq 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	561-41-1	209-218-2
α,α -Bis[4-(dimethylamino)phenyl]-4(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) [with \geq 0.1% of Michler's ketone (EC No. 202-027-5) or Michler's base (EC No. 202-959-2)]	6786-83-0	229-851-8



Technical Report No.68.434.17.0034.02A
Dated 2017-10-30

8. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN DECEMBER 2012 BY ECHA

Substance Name	CAS NO.	EC NO.
Bis(pentabromophenyl) ether (DecaBDE)	1163-19-5	214-604-9
Pentacosfluorotridecanoic acid	72629-94-8	276-745-2
Tricosfluorododecanoic acid	307-55-1	206-203-2
Henicosfluoroundecanoic acid	2058-94-8	218-165-4
Heptacosfluorotetradecanoic acid	376-06-7	206-803-4
4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated§	-	-
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§	-	-
Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3	204-650-8
Cyclohexane-1,2-dicarboxylic anhydride (Hexahydrophthalic anhydride - HHPA)	85-42-7	
Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	247-094-1, 243-072-0, 256-356-4, 260-566-1
Methoxy acetic acid	625-45-6	210-894-6
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0	284-032-2
Diisopentylphthalate (DIPP)	605-50-5	210-088-4
N-pentyl-isopentylphthalate	776297-69-9	-
1,2-Diethoxyethane	629-14-1	211-076-1
N,N-dimethylformamide; dimethyl formamide	68-12-2	200-679-5
Dibutyltin dichloride (DBT)	683-18-1	211-670-0
Acetic acid, lead salt, basic*	51404-69-4	257-175-3
Basic lead carbonate (trilead bis(carbonate)dihydroxide)*	1319-46-6	215-290-6
Lead oxide sulfate (basic lead sulfate)*	12036-76-9	234-853-7
[Phthalato(2-)]dioxotrilead (dibasic lead phthalate)*	69011-06-9	273-688-5
Dioxobis(stearato)trilead*	12578-12-0	235-702-8
Fatty acids, C16-18, lead salts*	91031-62-8	292-966-7
Lead bis(tetrafluoroborate)*	13814-96-5	237-486-0
Lead cyanamate*	20837-86-9	244-073-9
Lead dinitrate*	10099-74-8	233-245-9
Lead oxide (lead monoxide)*	1317-36-8	215-267-0
Lead tetroxide (orange lead)*	1314-41-6	215-235-6
Lead titanium trioxide*	12060-00-3	235-038-9
Lead Titanium Zirconium Oxide*	12626-81-2	235-727-4

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Technical Report No.68.434.17.0034.02A
Dated 2017-10-30

Substance Name	CAS NO.	EC NO.
Pentalead tetraoxide sulphate*	12065-90-6	235-067-7
Pyrochlore, antimony lead yellow*	8012-00-8	232-382-1
Silicic acid, barium salt, lead-doped*	68784-75-8	272-271-5
Silicic acid, lead salt*	11120-22-2	234-363-3
Sulfurous acid, lead salt, dibasic*	62229-08-7	263-467-1
Tetraethyllead*	78-00-2	201-075-4
Tetralead trioxide sulphate*	12202-17-4	235-380-9
Trilead dioxide phosphonate*	12141-20-7	235-252-3
Furan	110-00-9	203-727-3
Propylene oxide; 1,2-epoxypropane; methyloxirane	75-56-9	200-879-2
Diethyl sulphate	64-67-5	200-589-6
Dimethyl sulphate	77-78-1	201-058-1
3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2	421-150-7
Dinoseb	88-85-7	201-861-7
4,4'-methylenedi-o-toluidine	838-88-0	212-658-8
4,4'-oxydianiline and its salts	101-80-4	202-977-0
4-Aminoazobenzene; 4-Phenylazoaniline	60-09-3	200-453-6
4-methyl-m-phenylenediamine (2,4-toluene-diamine)	95-80-7	202-453-1
6-methoxy-m-toluidine (p-cresidine)	120-71-8	204-419-1
Biphenyl-4-ylamine	92-67-1	202-177-1
o-aminoazotoluene	97-56-3	202-591-2
o-Toluidine; 2-Aminotoluene	95-53-4	202-429-0
N-methylacetamide	79-16-3	201-182-6
1-bromopropane; n-propyl bromide	106-94-5	203-445-0



Technical Report No.68.434.17.0034.02A
Dated 2017-10-30

9. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2013 BY ECHA

Substance Name	CAS NO.	EC NO.
Cadmium	7440-43-9	231-152-8
Cadmium oxide*	1306-19-0	215-146-2
Dipentyl phthalate (DPP)	131-18-0	205-017-9
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]	-	-
Ammonium pentadecafluorooctanoate (APFO)	3825-26-1	223-320-4
Pentadecafluorooctanoic acid (PFOA)	335-67-1	206-379-9

10. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN DECEMBER 2013 BY ECHA

Substance Name	CAS NO.	EC NO.
Cadmium sulphide*	1306-23-6	215-147-8
Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0	209-358-4
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	217-710-3
Dihexyl phthalate	84-75-3	201-559-5
Imidazolidine-2-thione (2-imidazoline-2-thiol)	96-45-7	202-506-9
Lead di (acetate)	301-04-2	206-104-4
Trixylyl phosphate	25155-23-1	246-677-8

11. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2014 BY ECHA

Substance Name	CAS NO.	EC NO.
1, 2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4	271-093-5
Cadmium chloride*	10108-64-2	233-296-7
Sodium perborate, perboric acid, sodium salt*	--	239-172-9, 234-390-0
Sodium peroxometaborate*	7632-04-4	231-556-4



Technical Report No.68.434.17.0034.02A
Dated 2017-10-30

12. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN DECEMBER 2014 BY ECHA

Substance Name	CAS NO.	EC NO.
Cadmium fluoride*	7790-79-6	232-222-0
Cadmium sulphate*	10124-36-4; 31119-53-6	233-331-6
2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	223-346-6
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	247-384-8
2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1	239-622-4
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)	--	--

13. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2015 BY ECHA

Substance Name	CAS NO.	EC NO.
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with $\geq 0.3\%$ of dihexyl phthalate (EC No. 201-559-5)	68515-51-5 68648-93-1	271-094-0 272-013-1
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	--	--



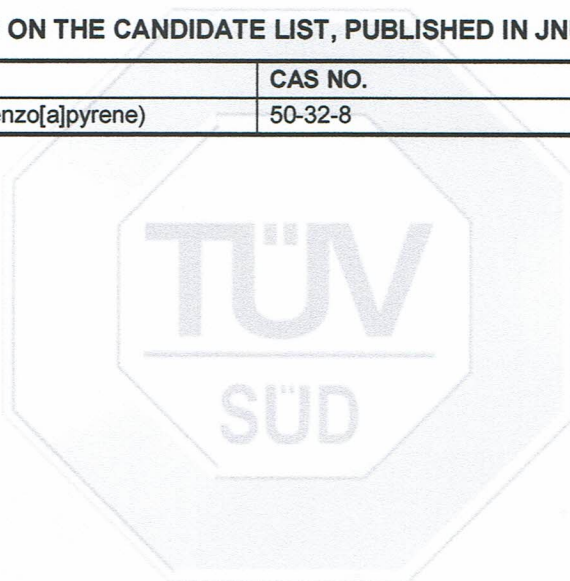
Technical Report No.68.434.17.0034.02A
Dated 2017-10-30

14. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN DECEMBER 2015 BY ECHA

Substance Name	CAS NO.	EC NO.
1,3-propanesultone	1120-71-4	214-317-9
2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1	223-383-8
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3	253-037-1
Nitrobenzene	98-95-3	202-716-0
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	206-801-3

15. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JUNE 2016 BY ECHA

Substance Name	CAS NO.	EC NO.
Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8	200-028-5





Technical Report No.68.434.17.0034.02A
Dated 2017-10-30

16. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JANUARY 2017 BY ECHA

Substance Name	CAS NO.	EC NO.
4,4'-isopropylidenediphenol (bisphenol A; BPA)	80-05-7	201-245-8
Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	335-76-2, 3830-45-3, 3108-42-7	206-400-3, 221-470-5
p-(1,1-dimethylpropyl)phenol	80-46-6	201-280-9
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 thereof]	-	-

17. REACH SVHCS ON THE CANDIDATE LIST, PUBLISHED IN JULY 2017 BY ECHA

Substance Name	CAS NO.	EC NO.
Perfluorohexane-1-sulfonic acid and its salts (PFHxS)	-	-

Note:

- “%” denotes percent by weight
- “<” denotes less than
- “*” denotes the concentration of substance cannot be determined directly but be converted from the concentration of specific heavy metal(s).
- “#” denotes the substances are UVCB (substance of unknown or variable composition, complex reaction products or biological material), the test results are calculated based on the main constituents.
- “§” The substances are UVCB (substance of unknown or variable composition, complex reaction products or biological material), the test results are calculated based on the main constituents.
- As per article 33 of the REACH regulation (EC No. 1907/2006), recipients of product must be provided with information of safe use if any of the tested substances exceeded 0.1% (w/w).