



January 15, 2019

Subject: EU Candidate List of Substances of Very High Concern (SVHC)

As of the date listed on this document, Flint Hills Resources, LP (FHR) does not believe any of the chemicals listed on the attached EU Candidate List of Substances of Very High Concern are present in our polypropylene products at levels greater than 0.1%.

Testing has indicated that some of our polypropylene products may contain trace residues (<8 ppm) of Dibutyl phthalate, Diisobutyl phthalate, and Bis (2-ethylhexyl) phthalate. Benzyl butyl phthalate was below the detection limit of the instrument used to test.

Please note that we have not specifically tested for all of these materials in our product(s) and supplier product information has not been verified by testing. Our determination regarding SVHC is based on supplier information and knowledge of the production processes for these products. FHR strongly recommends that each customer and/or end-user independently determine the suitability of FHR product(s) under actual conditions of processing and end-use.

If you have additional questions regarding Substances of Very High Concern and our products, please send them to REACH@fhr.com

This document will be updated when there are changes to the EU Candidate List of substances or if there are product composition changes that would require that additional information be provided. Customers are encouraged to visit the website www.fhr.com periodically to see if there have been any changes to this document.

Sincerely,

A handwritten signature in black ink that reads 'Michele J. Whiteley'.

Michele J. Whiteley
Program Manager, EH&S Chemical Compliance

This document is posted on the website www.fhr.com under Products & Services. Follow the links Olefins & Polymers → Polypropylene → Grade Selection & Technical Info → SVHC Letter.

EU Candidate List of Substances of Very High Concern (January 15, 2019)

Substance Name	EC Number	Basis for Identification as a SVHC
2,4-Dinitrotoluene	204-450-0	Carcinogenic (article 57a)
4,4'- Diaminodiphenylmethane (MDA)	202-974-4	Carcinogenic (article 57a)
5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	201-329-4	vPvB (article 57e)
Acrylamide	201-173-7	Carcinogenic and mutagenic (articles 57a and b)
Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5	PBT and vPvB (article 57d - e)
Aluminosilicate Refractory Ceramic Fibres		Carcinogenic (article 57a)
Anthracene	204-371-1	PBT (article 57d)
Anthracene oil	292-602-7	Carcinogenic, PBT and vPvB (articles 57a, 57d and 57e)
Anthracene oil, anthracene paste	292-603-2	Carcinogenic, mutagenic, PBT and vPvB (articles 57a, 57b, 57d and 57e)
Anthracene oil, anthracene paste, anthracene fraction	295-275-9	Carcinogenic, mutagenic, PBT and vPvB (articles 57a, 57b, 57d and 57e)
Anthracene oil, anthracene paste, distn. lights	295-278-5	Carcinogenic, mutagenic, PBT and vPvB (articles 57a, 57b, 57d and 57e)
Anthracene oil, anthracene-low	292-604-8	Carcinogenic, mutagenic, PBT and vPvB (articles 57a, 57b, 57d and 57e)
Benzyl butyl phthalate (BBP)	201-622-7	Toxic for reproduction (article 57c); Endocrine disrupting properties (Article 57f)
Bis (2-ethylhexyl)phthalate (DEHP)	204-211-0	Toxic for reproduction (article 57c)/Equivalent level of concern having probable serious effects to the environment (Article 57f); Endocrine disrupting properties (article 57f)
Bis(tributyltin)oxide (TBTO)	200-268-0	PBT (article 57d)
Cobalt dichloride	231-589-4	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
Diarsenic pentaoxide	215-116-9	Carcinogenic (article 57a)
Diarsenic trioxide	215-481-4	Carcinogenic (article 57a)
Dibutyl phthalate (DBP)	201-557-4	Toxic for reproduction (article

This document is posted on the website www.fhr.com under Products & Services.
 Follow the links Olefins & Polymers → Polypropylene → Grade Selection & Technical Info → SVHC Letter.

		57c); Endocrine disrupting properties (article 57f)
Diisobutyl phthalate (DIBP)	201-553-2	Toxic for reproduction (article 57c); Endocrine disrupting properties (article 57f)
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified: Alpha, Beta and Gamma	247-148-4 and 221-695-9 (134237-50-6) (134237-51-7) (134237-52-8)	PBT (article 57d)
Lead chromate	231-846-0	Carcinogenic and toxic for reproduction (articles 57a and c)
Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	235-759-9	Carcinogenic and toxic for reproduction (articles 57a and c)
Lead hydrogen arsenate	232-064-2	Carcinogenic and toxic for reproduction (articles 57a and c)
Lead sulfochromate yellow (C.I. Pigment Yellow 34)	215-693-7	Carcinogenic and toxic for reproduction (articles 57a and c)
Pitch, coal tar, high temp.	266-028-2	Carcinogenic, PBT and vPvB (articles 57a, 57d and 57e)
Sodium dichromate	234-190-3 (7789-12-0 and 10588-01-9)	Carcinogenic, mutagenic and toxic for reproduction (articles 57a, 57b and 57c)
Triethyl arsenate	427-700-2	Carcinogenic (article 57a)
Tris(2-chloroethyl)phosphate	204-118-5	Toxic for reproduction (article 57c)
Zirconia Aluminosilicate Refractory Ceramic Fibres		Carcinogenic (article 57a)
Trichloroethylene	201-167-4	Carcinogenic (article 57a)
Boric acid	233-139-2 / 234-343-4	Toxic for reproduction (article 57c)
Disodium tetraborate, anhydrous	215-540-4	Toxic for reproduction (article 57c)
Tetraboron disodium heptaoxide, hydrate	235-541-3	Toxic for reproduction (article 57c)
Potassium dichromate	231-906-6	Carcinogenic, mutagenic and toxic for reproduction (articles 57a, 57b and 57c)
Ammonium dichromate	232-143-1	Carcinogenic, mutagenic and toxic for reproduction (articles 57a, 57b and 57c)
Potassium chromate	232-140-5	Carcinogenic and mutagenic (articles 57a and b)

This document is posted on the website www.fhr.com under Products & Services.
Follow the links Olefins & Polymers → Polypropylene → Grade Selection & Technical Info → SVHC Letter.

Sodium chromate	231-889-5	Carcinogenic, mutagenic and toxic for reproduction (articles 57a, 57b and 57c)
2-Ethoxyethanol	203-804-1	Toxic for reproduction (article 57c)
2-Methoxyethanol	203-713-7	Toxic for reproduction (article 57c)
Chromic acid, Oligomers of chromic acid and dichromic acid, Dichromic acid	231-801-5 236-881-5	Carcinogenic (article 57a)
Chromium trioxide	215-607-8	Carcinogenic and mutagenic (articles 57a and b)
Cobalt (II) carbonate	208-169-4	Carcinogenic and toxic for reproduction (articles 57a and c)
Cobalt (II) diacetate	200-755-8	Carcinogenic and toxic for reproduction (articles 57a and c)
Cobalt (II) dinitrate	233-402-1	Carcinogenic and toxic for reproduction (articles 57a and c)
Cobalt (II) sulphate	233-334-2	Carcinogenic and toxic for reproduction (articles 57a and c)
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	276-158-1	Toxic for reproduction (article 57c)
1,2,3-Trichloropropane	202-486-1	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)
1-Methyl-2-pyrrolidone	212-828-1	Toxic for reproduction (article 57c)
Hydrazine	206-114-9	Carcinogenic (article 57a)
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	271-084-6	Toxic for reproduction (article 57c)
Strontium chromate	232-142-6	Carcinogenic (article 57a)
2-Ethoxyethyl acetate	203-839-2	Toxic for reproduction (article 57c)

This document is posted on the website www.fhr.com under Products & Services.
Follow the links Olefins & Polymers → Polypropylene → Grade Selection & Technical Info → SVHC Letter.

Zirconia Alumino Silicate 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 aluminum, 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 (µm). c) alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less or equal to 18% by weight		Carcinogenic (article 57 a)
Calcium arsenate	231-904-5	Carcinogenic (article 57 a)
Bis(2-methoxyethyl) ether	203-924-4	Toxic for reproduction (article 57 c)
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 aluminum 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 (µm) c) alkaline oxide and alkali earth oxide (Na ₂ O+K ₂ O+CaO+MgO+BaO) content less or equal to 18% by weight		Carcinogenic (article 57 a)
Potassium hydroxyoctaoxodizincatedichromate	234-329-8	Carcinogenic (article 57 a)
Lead dipicrate	229-335-2	Toxic for reproduction (article 57 c)
N,N-dimethylacetamide	204-826-4	Toxic for reproduction (article 57 c)
Arsenic acid	231-901-9	Carcinogenic (article 57 a)
2-Methoxyaniline; o-Anisidine	201-963-1	Carcinogenic (article 57 a)
Trilead diarsenate	222-979-5	Carcinogenic and toxic for reproduction (articles 57 a and 57 c)

This document is posted on the website www.fhr.com under Products & Services.
Follow the links Olefins & Polymers → Polypropylene → Grade Selection & Technical Info → SVHC Letter.

1,2-dichloroethane	203-458-1	Carcinogenic (article 57 a)
Pentazinc chromate octahydroxide	256-418-0	Carcinogenic (article 57 a)
4-(1,1,3,3-tetramethylbutyl)phenol	205-426-2	Equivalent level of concern having probable serious effects to the environment (article 57 f)
Formaldehyde, oligomeric reaction products with aniline	500-036-1	Carcinogenic (article 57 a)
Bis(2-methoxyethyl) phthalate	204-212-6	Toxic for reproduction (article 57 c)
Lead diazide, Lead azide	236-542-1	Toxic for reproduction (article 57 c),
Lead styphnate	239-290-0	Toxic for reproduction (article 57 c)
2,2'-dichloro-4,4'-methylenedianiline	202-918-9	Carcinogenic (article 57 a)
Phenolphthalein	201-004-7	Carcinogenic (article 57 a)
Dichromium tris(chromate)	246-356-2	Carcinogenic (article 57 a)
1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	Toxic for reproduction (article 57 c)
1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	Toxic for reproduction (article 57 c)
Diboron trioxide	215-125-8	Toxic for reproduction (article 57 c)
Formamide	200-842-0	Toxic for reproduction (article 57 c)
Lead(II) bis(methanesulfonate)	401-750-5	Toxic for reproduction (article 57 c)
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione (TGIC)	219-514-3	Mutagenic (Article 57 b)
1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β -TGIC)	423-400-0	Mutagenic (Article 57 b)
4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	Carcinogenic (article 57 a)
N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	Carcinogenic (article 57 a)
[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)]	219-943-6	Carcinogenic (article 57 a)
[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)]	208-953-6	Carcinogenic (article 57 a)
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)]	209-218-2	Carcinogenic (article 57 a)
α,α -Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-	229-851-8	Carcinogenic (article

This document is posted on the website www.fhr.com under Products & Services.
Follow the links Olefins & Polymers \rightarrow Polypropylene \rightarrow Grade Selection & Technical Info \rightarrow SVHC Letter.

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)]		57 a)
Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	214-604-9	PBT (Article 57 d); vPvB (Article 57 e)
Pentacosafuorotridecanoic acid	276-745-2	vPvB (Article 57 e)
Tricosafuorododecanoic acid	206-203-2	vPvB (Article 57 e)
Henicosafuoroundecanoic acid	218-165-4	vPvB (Article 57 e)
Heptacosafuorotetradecanoic acid	206-803-4	vPvB (Article 57 e)
Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	204-650-8	Equivalent level of concern having probable serious effects to human health (Article 57 f)
Cyclohexane-1,2-dicarboxylic anhydride [1] cis-cyclohexane-1,2-dicarboxylic anhydride [2] trans-cyclohexane-1,2-dicarboxylic anhydride [3] <i>[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].</i>	201-604-9, 236-086-3, 238-009-9	Equivalent level of concern having probable serious effects to human health (Article 57 f)
Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4] <i>[The individual isomers [2], [3] and [4] (including their cis- and trans- stereo isomeric forms) and all possible combinations of the isomers [1] are covered by this entry]</i>	247-094-1, 243-072-0, 256-356-4, 260-566-1	Equivalent level of concern having probable serious effects to human health (Article 57 f)
4-Nonylphenol, branched and linear <i>[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]</i>	-	Equivalent level of concern having probable serious effects to the environment (Article 57 f)
4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated <i>[covering well-defined substances and UVCB substances, polymers and homologues]</i>	-	Equivalent level of concern having probable serious effects to the environment (Article 57 f)
Methoxyacetic acid	210-894-6	Toxic for reproduction (Article 57 c)

This document is posted on the website www.fhr.com under Products & Services.
Follow the links Olefins & Polymers → Polypropylene → Grade Selection & Technical Info → SVHC Letter.

N,N-dimethylformamide	200-679-5	Toxic for reproduction (Article 57 c)
Dibutyltin dichloride (DBTC)	211-670-0	Toxic for reproduction (Article 57 c)
Lead monoxide (Lead oxide)	215-267-0	Toxic for reproduction (Article 57 c)
Orange lead (Lead tetroxide)	215-235-6	Toxic for reproduction (Article 57 c)
Lead bis(tetrafluoroborate)	237-486-0	Toxic for reproduction (Article 57 c)
Trilead bis(carbonate)dihydroxide	215-290-6	Toxic for reproduction (Article 57 c)
Lead titanium trioxide	235-038-9	Toxic for reproduction (Article 57 c)
Lead titanium zirconium oxide	235-727-4	Toxic for reproduction (Article 57 c)
Silicic acid, lead salt	234-363-3	Toxic for reproduction (Article 57 c)
Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped <i>[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]</i>	272-271-5	Toxic for reproduction (Article 57 c)
1-bromopropane (n-propyl bromide)	203-445-0	Toxic for reproduction (Article 57 c)
Methyloxirane (Propylene oxide)	200-879-2	Carcinogenic (Article 57a); Mutagenic (Article 57b)
1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	Toxic for reproduction (Article 57 c)
N-pentyl-isopentylphthalate	-	Toxic for reproduction (Article 57 c)
4,4'-oxydianiline and its salts	202-977-0	Carcinogenic (Article 57a); Mutagenic (Article 57b)

This document is posted on the website www.fhr.com under Products & Services.
Follow the links Olefins & Polymers → Polypropylene → Grade Selection & Technical
Info → SVHC Letter.

Fatty acids, C16-18, lead salts	292-966-7	Toxic for reproduction (Article 57 c)
Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	Toxic for reproduction (Article 57 c)
Lead oxide sulfate	234-853-7	Toxic for reproduction (Article 57 c)
Furan	203-727-3	Carcinogenic (Article 57a)
Dioxobis(stearato)trilead	235-702-8	Toxic for reproduction (Article 57 c)
4,4'-methylenedi-o-toluidine	212-658-8	Carcinogenic (Article 57a)
[Phthalato(2-)]dioxotrilead	273-688-5	Toxic for reproduction (Article 57 c)
Diethyl sulphate	200-589-6	Carcinogenic (Article 57a); Mutagenic (Article 57b)
o-aminoazotoluene	202-591-2	Carcinogenic (Article 57a)
4-Aminoazobenzene	200-453-6	Carcinogenic (Article 57a)
4-methyl-m-phenylenediamine (toluene-2,4-diamine)	202-453-1	Carcinogenic (Article 57a)
o-Toluidine	202-429-0	Carcinogenic (Article 57a)
6-methoxy-m-toluidine (p-cresidine)	204-419-1	Carcinogenic (Article 57a)
Sulfurous acid, lead salt, dibasic	263-467-1	Toxic for reproduction (Article 57 c)
Tetralead trioxide sulphate	235-380-9	Toxic for reproduction (Article 57 c)
Pyrochlore, antimony lead yellow	232-382-1	Toxic for reproduction (Article 57 c)
Lead dinitrate	233-245-9	Toxic for reproduction (Article 57 c)
Trilead dioxide phosphonate	235-252-2	Toxic for reproduction (Article 57 c)
N-methylacetamide	201-182-6	Toxic for reproduction (Article 57 c)
Biphenyl-4-ylamine	202-177-1	Carcinogenic (Article 57a)
Acetic acid, lead salt, basic	257-175-3	Toxic for reproduction (Article 57 c)
Diisopentylphthalate	210-088-4	Toxic for reproduction (Article 57 c)
Tetraethyllead	201-075-4	Toxic for reproduction (Article 57 c)
1,2-Diethoxyethane	211-076-1	Toxic for reproduction (Article 57 c)
Dimethyl sulphate	201-058-1	Carcinogenic (Article 57a)
Pentalead tetraoxide sulphate	235-067-7	Toxic for

This document is posted on the website www.fhr.com under Products & Services.
Follow the links Olefins & Polymers → Polypropylene → Grade Selection & Technical
Info → SVHC Letter.

		reproduction (Article 57 c)
Lead cyanamidate	244-073-9	Toxic for reproduction (Article 57 c)
3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	Toxic for reproduction (Article 57 c)
Cadmium	231-152-8	Carcinogenic (Article 57a) Equivalent level of concern having probable serious effects to human health (Article 57 f)
Cadmium oxide	215-146-2	Carcinogenic (Article 57a) Equivalent level of concern having probable serious effects to human health (effects on kidney and bone) (Article 57 f)
Ammonium pentadecafluorooctanoate (APFO)	223-320-4	Toxic for reproduction (Article 57 c) PBT (Article 57 d)
Pentadecafluorooctanoic acid (PFOA)	206-397-9	Toxic for reproduction (Article 57 c) PBT (Article 57 d)
Dipentyl phthalate (DPP)	205-017-9	Toxic for reproduction (Article 57 c)
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]	-	Equivalent level of concern having probable serious effects to the environment (due to endocrine disrupting properties of the degradation products) (Article 57 f)
Cadmium sulphide	215-147-8	Carcinogenic (Article 57a) Equivalent level of concern having probable serious effects to human health (Article 57 f)
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)	217-710-3	Carcinogenic (Article 57a)
Dihexyl phthalate	201-559-5	Toxic for reproduction (Article 57 c)
Imidazolidine-2-thione; (2-imidazoline-2-thiol)	202-506-9	Toxic for reproduction (Article

This document is posted on the website www.fhr.com under Products & Services.
Follow the links Olefins & Polymers → Polypropylene → Grade Selection & Technical Info → SVHC Letter.

		57 c)
Trixylyl phosphate	246-677-8	Toxic for reproduction (Article 57 c)
Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	209-358-4	Carcinogenic (Article 57a)
Lead di(acetate)	206-104-4	Toxic for reproduction (Article 57 c)
Cadmium chloride	233-296-7	Carcinogenic (Article 57a); Mutagenic (Article 57b); Toxic for reproduction (Article 57 c); Equivalent level of concern having probable serious effects to human health (Article 57 f)
1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	271-093-5	Toxic for reproduction (Article 57 c)
Sodium peroxometaborate	231-556-4	Toxic for reproduction (Article 57 c)
Sodium perborate; perboric acid, sodium salt	239-172-9; 234-390-0	Toxic for reproduction (Article 57 c)
Cadmium fluoride	232-222-0	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Toxic for reproduction (Article 57 c); Equivalent level of concern having probable serious effects to human health (Article 57 f)
Cadmium sulphate	233-331-6	Carcinogenic (Article 57 a); Mutagenic (Article 57 b); Toxic for reproduction (Article 57 c); Equivalent level of concern having probable serious effects to human health (Article 57 f)
2-benzotriazol-2-yl-4-6-di-tert-butylphenol (UV-320)	223-346-6	PBT (Article 57 d); vPvB (Article 57 e)
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	247-384-8	PBT (Article 57 d); vPvB (Article 57 e)
2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	239-622-4	Toxic for reproduction (Article 57 c)
reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-	-	Toxic for

This document is posted on the website www.fhr.com under Products & Services.
Follow the links Olefins & Polymers → Polypropylene → Grade Selection & Technical Info → SVHC Letter.

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)		reproduction (Article 57 c)
1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate (EC No. 201-559-5)	271-094-0 272-013-1	Toxic for reproduction (Article 57 c)
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 stereoisomers of [1] and [2] or any combination thereof]	-	vPvB (Article 57e)
Nitrobenzene	202-716-0	Toxic for reproduction (Article 57 c)
2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)	223-383-8	vPvB (Article 57 e)
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	253-037-1	vPvB (Article 57 e)
1,3-propanesultone	214-317-9	Carcinogenic (Article 57 a)
Perfluorononan-1-oic-acid and its sodium and ammonium salts	206-801-3	Toxic for reproduction (Article 57 c) PBT (Article 57 d)
Benzo[def]chrysene	200-028-5	Carcinogenic (Article 57a) Mutagenic (Article 57b) Toxic for reproduction (Article 57c) PBT (Article 57 d)
4,4'-isopropylidenediphenol (bisphenol A; BPA)	201-245-8	Toxic for reproduction (Article 57 c); Endocrine disrupting properties (Article 57f)
Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	206-400-3 - 221-470-5	Toxic for reproduction (Article 57 c) PBT (Article 57d)
<i>p</i> -(1,1-dimethylpropyl)phenol	201-280-9	Equivalent level of concern having probable serious effects to environment (Article 57f)
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]	-	Equivalent level of concern having probable serious effects to environment (Article 57f)
Perfluorohexane-1-sulfonic acid and its salts (PFHxS)	-	vPvB (Article 57e)
4,4'-isopropylidenediphenol (bisphenol A; BPA)	201-245-8	Endocrine disrupting properties (Article 57(f) - environment)
Chrysene	205-923-4	Carcinogenic (Article 57a) PBT (Article 57d)vPvB (Article 57e)
Benz[a]anthracene	200-280-6	Carcinogenic (Article 57a) PBT (Article

This document is posted on the website www.fhr.com under Products & Services.
Follow the links Olefins & Polymers → Polypropylene → Grade Selection & Technical Info → SVHC Letter.

		57d)vPvB (Article 57e)
Cadmium nitrate	233-710-6	Carcinogenic (Article 57a)Mutagenic (Article 57b) Specific target organ toxicity after repeated exposure (Article 57(f) - human health)
Cadmium hydroxide	244-168-5	Carcinogenic (Article 57a)Mutagenic (Article 57b) Specific target organ toxicity after repeated exposure (Article 57(f) - human health)
Cadmium carbonate	208-168-9	Carcinogenic (Article 57a)Mutagenic (Article 57b) Specific target organ toxicity after repeated exposure (Article 57(f) - human health)
1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.1 ^{6,9} .0 ^{2,13} .0 ^{5,10}]octadeca-7,15-diene ("Dechlorane Plus" TM) [covering any of its individual anti- and syn-isomers or any combination thereof]	-	vPvB (Article 57e)
Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) [with ≥0.1% w/w 4-heptylphenol, branched and linear]	-	Endocrine disrupting properties (Article 57(f) – environment)
Octamethylcyclotetrasiloxane (D4)	209-136-7	PBT (Article 57d), vPvB (Article 57e)
Decamethylcyclopentasiloxane (D5)	208-764-9	PBT (Article 57d), vPvB (Article 57e)
Dodecamethylcyclohexasiloxane (D6)	208-762-8	PBT (Article 57d), vPvB (Article 57e)
Lead	231-100-4	Toxic for reproduction (Article 57c)
Disodium octaborate	234-541-0	Toxic for reproduction (Article 57c)
Benzo[ghi]perylene	205-883-8	PBT (Article 57d), vPvB (Article 57e)
Terphenyl hydrogenated	262-967-7	vPvB (Article 57e)
Ethylenediamine (EDA)	203-468-6	Respiratory sensitizing properties (Article 57(f) – human health)
Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride) (TMA)	209-008-0	Respiratory sensitizing properties (Article 57(f) – human health)
Dicyclohexyl phthalate (DCHP)	201-545-9	Toxic for reproduction (Article

This document is posted on the website www.fhr.com under Products & Services. Follow the links Olefins & Polymers → Polypropylene → Grade Selection & Technical Info → SVHC Letter.

		57c), Endocrine disrupting properties (Article 57(f) – human health)
2,2-bis(4'-hydroxyphenyl)-4-methylpentane	401-720-1	Toxic for reproduction (Article 57c)
Benzo[k]fluoranthene	205-916-6	Carcinogenic (Article 57a) PBT (Article 57d) vPvB (Article 57e)
Fluoranthene	205-912-4	PBT (Article 57d)vPvB (Article 57e)
Phenanthrene	201-581-5	vPvB (Article 57e)
Pyrene	204-927-3	PBT (Article 57d) vPvB (Article 57e)
1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one	239-139-9	Endocrine disrupting properties (Article 57(f) - environment)

This document is posted on the website www.fhr.com under Products & Services.
 Follow the links Olefins & Polymers → Polypropylene → Grade Selection & Technical
 Info → SVHC Letter.