Deselection of substances

Following expert review of additional data that has come forward, OSPAR has removed several substances from the list of substances of possible concern since it was first published. Information on these substances and the reasons for their removal can be found on the List of Substances Removed from the OSPAR List of Substances of Possible Concern (Reference number 2004-13).

The fact sheets for the deselected substances have been updated to include information about the reasons for deselection. Following this the fact sheets have been removed from the website and will not be updated any further. They are stored in the database of the OSPAR Secretariat and can be made available upon request to the Secretariat.

Visitors to this web site who have information which would enable OSPAR to update its List of Substances of Possible Concern are invited to contact the OSPAR Secretariat who will advise them further regarding the submission of relevant information. An empty fact sheet for the submission of such information and a glossary explaining the content of the fact sheet are available for downloading.

Substances removed from the OSPAR List of Substances of Possible Concern

Annotations in the last column indicate that the substance belongs to a group of substances on the OSPAR List of Chemicals for Priority Action as follows:

* PAHS, † Organic Tin Compounds, ‡ PCBs

CAS No.	Name	Synonym	Function or use category	Deselected by	
79-74-3	**1,4-benzenediol, 2,5-bis(1,1-dimethylpropyl)-**		Phenol	HSC 2004	
80-56-8	**Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl-**	Alpha pinene	Aliphatic hydrocarbon	HSC 2008	
81-96-9	**7H-benz[de]anthracen-7-one, 3-bromo-**		Organohalogen	HSC 2004	
91-57-6	**naphthalene, 2-methyl-**	ß-methylnaphthalene	PAH	HSC 2004	*
92-86-4	**1,1'-biphenyl, 4,4'-dibromo-**		Organohalogen	HSC 2004	
93-79-8	**acetic acid, (2,4,5-trichlorophenoxy)-, butyl ester**	butyl 2,4,5-T	Pesticide	HSC 2004	
107-46-0	**Hexamethyldisiloxane**	HMDS	Organosilicane	HSC(1) 2007	

CAS No.	Name	Synonym	Function or use category	Deselected by	
120-39-8	**acetic acid, (2,4,5-trichlorophenoxy)-, pentyl ester**	2,4,5-T esters	Pesticide	HSC 2004	
123-48-8	**3-heptene, 2,2,4,6,6-pentamethyl-**		Aliphatic hydrocarbon	HSC 2004	
127-25-3	**1-phenanthrenecarboxylic acid, 1,2,3,4,4a,4b,5,6,10,10a-decahydro-1,4a-dimethyl-7-(1-methylethyl)-, methyl ester, [1R-(1.alpha.,4a.beta.,4b.alpha.,10a.alpha.)]-**	abietic acid methyl ester	PAH	HSC 2004	*
127-36-6	**1-phenanthrenemethanol, 1,2,3,4,4a,4b,5,6,7,9,10,10a-dodecahydro-1,4a-dimethyl-7-(1-methylethyl)-**		PAH	HSC 2004	*
134-83-8	**benzene, 1-chloro-4-(chlorophenylmethyl)-**		Organohalogen	HSC 2004	
194-59-2	**7H-dibenzo[c,g]carbazole**		PAH	HSC 2004	*
239-64-5	**13H-dibenzo[a,i]carbazole**		PAH	HSC 2004	*
315-37-7	**androst-4-en-3-one, 17-[(1-oxoheptyl)oxy]-, (17.beta.)-**	testosterone-enantate- (INNM)	Hormone	HSC 2004	
469-61-4	**1H-3a,7-methanoazulene, 2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-, [3R-(3alpha,3abeta,7beta,8aalpha)]-**	alpha.-cedrene	PAH	HSC 2004	*
485-31-4	**2-butenoic acid, 3-methyl-, 2-(1-methylpropyl)-4,6-dinitrophenyl ester**	binapacryl	Pesticide	HSC 2004	
515-69-5	**3-cyclohexene-1-methanol, .alpha.,4-dimethyl-.alpha.-(4-methyl-3-pentenyl)-, (R*,R*)-**	bisabolol	Aliphatic hydrocarbon	HSC 2004	
563-12-2	**phosphorodithioic acid, S,S'-methylene O,O,O',O'-tetraethyl ester**	ethion	Pesticide	HSC 2004	
612-83-9	**[1,1'-biphenyl]-4,4'-diamine, 3,3'-dichloro-, dihydrochloride**		Organohalogen	HSC 2004	
634-83-3	**benzenamine, 2,3,4,5-tetrachloro-**		Organohalogen	HSC 2004	
666-84-2	**1-phenanthrenemethanol, 1,2,3,4,4a,4b,5,6,10,10a-decahydro-1,4a-dimethyl-7-(1-methylethyl)-, [1R-(1.alpha.,4a.beta.,4b.alpha.,10a.alpha.)]-**		PAH	HSC 2004	*
786-19-6	**phosphorodithioic acid, S-[[(4-chlorophenyl)thio]methyl] O,O-diethyl ester**	carbophenthion	Pesticide	HSC 2004	
947-72-8	**phenanthrene, 9-chloro-**		Organohalogen	HSC 2004	
1330-78-5	**phosphoric acid, tris(methylphenyl) ester**	tricresylphosphate	Organophosphate	HSC 2004	
2050-68-2	**1,1'-biphenyl, 4,4'-dichloro-**		Organohalogen	HSC 2004	‡
3081-14-9	**1,4-benzenediamine, N,N'-bis(1,4-dimethylpentyl)-**		Organic nitrogen compound	HSC 2004	
3090-36-6	**stannane, tributyl(1-oxododecyl)oxy-**	tributyltin laurate	pesticide	HSC 2004	†
3178-22-1	**cyclohexane, (1,1-dimethylethyl)-**		Aliphatic Hydrocarbon	HSC 2004	

CAS No.	Name	Synonym	Function or use category	Deselected by	
3481-20-7	**benzenamine, 2,3,5,6-tetrachloro-**		Organohalogen	HSC 2004	
4098-71-9	**cyclohexane, 5-isocyanato-1(isocyanatomethyl)-1,3,3-trimethyl-**			SPS 2002	
5208-93-5	**1,4-pentadien-3-ol, 3-methyl-1-(2,6,6-trimethyl-1-cyclohexen-1-yl)-**	vinyl-.beta.-ionol	Aliphatic hydrocarbon	HSC 2004	
6119-92-2	**2-butenoic acid, 2-(1-methylheptyl)-4,6-dinitrophenyl ester**		Organic nitrogen compound	HSC 2004	
7212-44-4	**1,6,10-dodecatrien-3-ol, 3,7,11-trimethyl-**	nerolidol	Pesticide	HSC 2004	
10457-90-6	**bromperidol**		Organohalogen	HSC 2004	
11028-42-5	**cedrene-**		PAH	HSC 2004	*
13393-93-6	**1-phenanthrenemethanol, tetradecahydro-1,4a-dimethyl-7-(1-methylethyl)-**	abietyl alcohol, tetrahydro-	PAH	HSC 2004	*
13475-82-6	**heptane, 2,2,4,6,6-pentamethyl-**		Aliphatic hydrocarbon	HSC 2004	
15233-47-3	**1,4-benzenediamine, N-(1-methylheptyl)-N'-phenyl-**		Organic nitrogen compound	HSC 2004	
16938-22-0	**hexane, 1,6-diisocyanato-2,2,4-trimethyl-**			SPS 2002	
17354-14-2	**9,10-anthracenedione, 1,4-bis(butylamino)-**	C.I. Solvent Blue 35	Organic nitrogen compound	HSC 2004	
18379-25-4	**silane, trichloro(2,4,4-trimethylpentyl)-**		Organohalogen	HSC 2004	
19666-30-9	**1,3,4-Oxadiazol-2(3H)-one, 3-[2,4-dichloro-5-(1-methylethoxy)phenyl]-5-(1,1-dimethylethyl)-**	oxidiazon	Pesticide	HSC 2005	
19941-28-7	**1-phenanthrenecarboxylic acid, tetradecahydro-1,4a-dimethyl-7-(1-methylethyl)-, methyl ester, [1R-(1alpha,4abeta,4balpha**	methyl tetrahydroabietate	PAH	HSC 2004	*
21850-44-2	**Benzene, 1,1'-(1-methylethylidene)bis[3,5-dibromo-4-(2,3-dibromopropoxy)-**		Organohalogen	HSC 2009	
23089-26-1	**3-cyclohexene-1-methanol, alpha,4-dimethyl-alpha-(4-methyl-3-pentenyl)-, [S-(R1,R1)]-**	levomenol	Aliphatic hydrocarbon	HSC 2004	
25428-43-7	**3-cyclohexene-1-methanol, .alpha.,4-dimethyl-.alpha.-(4-methyl-3-pentenyl)-, (R*,R*)-(.+-.)-**		Pesticide	HSC 2004	
28553-12-0	**1,2-Benzenedicarboxylic acid, diisononyl ester**	DINP	Phthalates	HSC(1) 2006	
28772-56-7	**2H-1-benzopyran-2-one, 3-[3-(4'-bromo[1,1'-biphenyl]-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxy-**	bromadiolone	Pesticide	HSC 2004	
32388-55-9	**ethanone, 1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)-, [3R-(3alpha,3abeta,7beta,8aalpha)]**	9-Acetyl-8-cedrene	Aromatic hydrocarbon	HSC 2004	
39083-38-0	**2-hexene, 3,4,5,5-tetramethyl-**		Aliphatic hydrocarbon	HSC 2004	

CAS No.	Name	Synonym	Function or use category	Deselected by	
39300-45-3	**2-butenoic acid, 2(or 4)-isooctyl-4,6(or 2,6)-dinitrophenyl ester**	dinocap	Pesticide	HSC 2004	
39515-41-8	**(RS)-alpha-cyano-3-phenoxybenzyl 2,2,3,3-tetramethylcyclopropanecarboxylate**	Fenpropathrin	Pyretroid	HSC(1) 2006	
40487-42-1	**Benzenamine, N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitro-**	pendimethalin	Pesticide	HSC(1) 2006	
40716-66-3	**1,6,10-dodecatrien-3-ol, 3,7,11-trimethyl-, (E)-**		Aliphatic hydrocarbon	HSC 2004	
42576-02-3	**Benzoic acid, 5-(2,4-dichlorophenoxy)-2-nitro-, methyl ester**	Bifenox	Pesticide	HSC 2009	
51630-58-1	**(RS)-alpha-cyano-3-phenoxybenzyl (RS)-2-(4-chlorophenyl)-3-methylbutyrate**	fenvalerate	Pesticide	HSC 2005	
52315-07-8	**cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester**	cypemethrin	Pesticide	HSC 2004	
52645-53-1	**cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (3-phenoxyphenyl)methyl ester**	permethrin	Pesticide	HSC 2004	
52918-63-5	**cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester, [1R-[1.alpha.(S*),3.alpha.]]-**	deltamethrin	Pesticide	HSC 2004	
53500-83-7	**oxiranecarboxylic acid, 3-methyl-3-[4-(2-methylpropyl)phenyl]-, 1-methylethyl ester**		Aliphatic hydrocarbon	HSC 2004	
54914-37-3	**cyclohexanemethanamine,1,3,3-trimethyl-N-(2-methylpropylidene)-5-[(2-methylpropylidene) amino]**			HSC 2003	
57018-04-9	**O-2,6-dichloro-4-methylphenyl O,O-dimethyl phosphorothioate**	tolclofos-methyl	Pesticide	HSC 2005	
57499-57-7	**ethanone, 1-[1,6-dimethyl-4-(4-methyl-3-pentenyl)-3-cyclohexen-1-yl]-**		Aliphatic hydrocarbon	HSC 2004	
57966-95-7	**cymoxanil**			SPS 2002	
62199-62-6	**heptane, 2,2,4,4,6-pentamethyl-**		Pesticide	HSC 2004	
63059-55-2	**hexanoyl chloride, 2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-**		Aliphatic hydrocarbon	HSC 2004	
64257-84-7	**(RS)-alpha-cyano-3-phenoxy-benzyl 2,2,3,3-tetramethylcyclopropane carboxylate**	fenpropathrin	Pyretroid	HSC 2005	
66230-04-4	**(S)-alpha-cyano-3-phenoxybenzyl (S)-2-(4-chlorophenyl)-3-methylbutyrate**	esfenvalerate	Pesticide	HSC 2005	
67375-30-8	**cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester, [1-alpha.(S*),3.alpha.]-(.+-.)-**	alphacypermethrin	Pesticide	HSC 2004	
68359-37-5	**Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(4-fluoro-3-phenoxyphenyl)methyl ester**	cyfluthrin	Pyretreid	HSC 2005	
68515-48-0	**1,2-Benzenedicarboxylic acid, di-C8-10-branched alkyl esters, C9-rich**	DINP	Phthalates	HSC(1) 2006	

CAS No.	Name	Synonym	Function or use category	Deselected by	
68517-09-9	**ethanone, 1-(2-hydroxy-5-tert-nonylphenyl)-, oxime**		Organic nitrogen compound	HSC 2004	
68877-29-2	**cyclohexanol, (1,7,7-trimethylbicyclo[2.2.1]hept-2-yl)-**	bornylcyclohexanol	Aromatic hydrocarbon	HSC 2004	
74070-46-5	**Benzenamine, 2-chloro-6-nitro-3-phenoxy-**	aclonifen	Aromatic amine	HSC 2005	
97280-83-6	**dodecene, branched**	isododecene	Aliphatic hydrocarbon	HSC 2004	
111479-05-1	**Propaquizafop**	Propaquizafop	Pesticide	HSC 2008	

Substances removed from the OSPAR List of Chemicals for Priority Action

CAS No.	Name	Synonym	Function or use category	Deselected by	Note
77-47-4	**1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-**	Hexachlorocyclopentadiene (HCCP)	Aliphatic halogen	HSC 2005	
98-51-1	**Benzene, 1-(1,1-dimethylethyl)-4-methyl-**	4-*tert*-butyltoluene	Benzene	HSC 2005	
107-46-0	**Hexamethyldisiloxane**	HMDS	Organosilicane	HSC(1) 2007	
603-35-0	**Phosphine, triphenyl-**	triphenylphosphine	Phosphine	HSC 2005	
26761-40-0	**di-"isodecyl"phthalate**	DIDP	Phthalate	HSC(1) 2006	
28553-12-0	**1,2-Benzenedicarboxylic acid, diisononyl ester**	DINP	Phthalate	HSC(1) 2006	
68515-48-0	**1,2-Benzenedicarboxylic acid, di-C8-10-alkyl esters, branched**	DINP	Phthalate	HSC(1) 2006	
68515-49-1	**1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich**	DIDP	Phthalate	HSC(1) 2006	

Reasons for deselection

hexane, 1,6-diisocyanato-2,2,4-trimethyl- (CAS No. 16938-22-0)

Evaluation by the IGE

Hydrolysis of isocyanates is self-evident. Information on the principal degradation product indicates a low potential for bioaccumulation. The substance does not fulfil the B criterion.

Bicyclo[3.1.1]hept-2-ene, 2,6,6-trimethyl- (CAS No. 80-56-8)

Evaluation by the IGE

The PBT Working Group of the Technical Committee of the European Chemicals Bureau evaluated in 2004 "terpenes and terpenoids, turpentine-oil, alpha-pinene fraction" and concluded to de-list alpha-pinene (CAS No. 80-56-8) from the candidate PBT/vPvB list since it did not fulfil the criteria of the EU Technical Guidance Document. An assessment against the OSPAR PBT criteria led to the conclusion that the P-criterion is not fulfilled, while B and T criteria are fulfilled. Based on the low persistence of the substance, IGE recommended deselecting alpha-pinene from the OSPAR List of Substances of Possible Concern.

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cyclohexane, 5-isocyanato-1(isocyanatomethyl)-1,3,3-trimethyl- (CAS No. 4098-71-9)

Evaluation by the IGE

Hydrolysis of isocyanates is self-evident. Information on the principal degradation product indicates a low potential for bioaccumulation. The substance does not fulfil the B criterion.

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cymoxanil (CAS No. 57966-95-7)

Evaluation by IGE

A report provided by industry on bioaccumulation, log Kow, biodegradation and fish and invertebrate toxicity study, revealing that half life is only 32 hours and not > 30 days, toxicity values at 20 to 30 mg/l and BCF and Kow < 10 (not corresponding to log values) was sufficient. The substance does not fulfil the PBT criteria.

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cyclohexanemethanamine,1,3,3-trimethyl-N-(2-methylpropylidene)-5-[(2-methylpropylidene) amino] (CAS No. 54914-37-3)

Evaluation by the IGE

Hydrolysis of this substance is not self-evident. However, industry provided background documentation on the hydrolysis over the pH range 4-9, which showed that substance hydrolyses rapidly. The substance does not fulfil the P criterion.

1,4-benzenediol, 2,5-bis(1,1-dimethylpropyl)- (CAS No. 79-74-3)

Evaluation by the IGE

The QSAR-DK: Syracuse Version of H. Loonen's Simca Fragment non-linear MITI model calculation led to an initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. As BIOWIN3= 2.3344 is above the threshold of 2.2, the combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfill the persistence criterion. QSAR-DK concluded from BIOWIN1 and BIOWIN3 indicates that the substance is inherently biodegradable (more than 70%). The substance does not fulfil the P criterion.

7H-benz[de]anthracen-7-one, 3-bromo- (CAS No. 81-96-9)

Evaluation by the IGE

As BIOWIN3= 2.3750 is above the threshold of 2.2 and the QSAR-DK concluded from BIOWIN1 and BIOWIN3 indicates that the substance is inherently biodegradable more than 70%, the substance does not fulfil the P criterion.

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naphthalene, 2-methyl- (CAS No. 91-57-6) – ß-methylnaphthalene

Evaluation by the IGE

Information from industry on biodegradability and bioaccumulation potential is sufficient although the whole reports with all raw data were not provided. The test results on bioaccumulation showed that this was a borderline case. The test results on biodegradation clearly showed half life below 50 days. The substance therefore does not fulfil the P criterion.

1,1'-biphenyl, 4,4'-dibromo- (CAS No. 92-86-4)

Evaluation by the IGE

The QSAR-DK: Syracuse Version of H. Loonen's Simca Fragment non-linear MITI model calculation led to an initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. As BIOWIN3= 2.2377 is above the threshold of 2.2 and QSAR-DK concluded from BIOWIN1 and BIOWIN3 indicates that the substance is inherently biodegradable (more than 70%), the combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

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acetic acid, (2,4,5-trichlorophenoxy)-, butyl ester (CAS No. 93-79-8) – butyl 2,4,5-T

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to an initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

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acetic acid, (2,4,5-trichlorophenoxy)-, pentyl ester (CAS No. 120-39-8) – 2,4,5-T esters

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

3-heptene, 2,2,4,6,6-pentamethyl- (CAS No. 123-48-8)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

1-phenanthrenecarboxylic acid, 1,2,3,4,4a,4b,5,6,10,10a-decahydro-1,4a-dimethyl-7-(1-methylethyl)-, methyl ester, [1R-(1.alpha.,4a.beta.,4b.alpha.,10a.alpha.)]- (CAS No. 127-25-3) – abietic acid methyl ester

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

1-phenanthrenemethanol, 1,2,3,4,4a,4b,5,6,7,9,10,10a-dodecahydro-1,4a-dimethyl-7-(1-methylethyl)- (CAS No. 127-36-6)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

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benzene, 1-chloro-4-(chlorophenylmethyl)- (CAS No. 134-83-8)

Evaluation by the IGE

As BIOWIN3 = 2.3174 is above the threshold of 2.2 and the QSAR-DK concluded from BIOWIN1 and BIOWIN3 indicates that the substance is inherently biodegradable more than 70%, the substance is considered as non persistent. The substance does not fulfil the P criterion.

7H-dibenzo[c,g]carbazole (CAS No. 194-59-2)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

13H-dibenzo[a,i]carbazole (CAS No. 239-64-5)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

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androst-4-en-3-one, 17-[(1-oxoheptyl)oxy]-, (17.beta.)- (CAS No. 315-37-7) – testosterone-enantate- (INNM)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

1H-3a,7-methanoazulene, 2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-, [3R-(3alpha,3abeta,7beta,8aalpha)]- (CAS No. 469-61-4) – .alpha.-cedrene

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

2-butenoic acid, 3-methyl-, 2-(1-methylpropyl)-4,6-dinitrophenyl ester (CAS No. 485-31-4) – binapacryl

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD

(combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

3-cyclohexene-1-methanol, .alpha.,4-dimethyl-.alpha.-(4-methyl-3-pentenyl)-, (R*,R*)- (CAS No. 515-69-5) – .alpha.-bisabolol

Evaluation by the IGE

Study reports on biodegradability and acute toxicity tests on fish and daphnids challenging the non fulfilment of the P and T criteria provided by industry were sufficient. It was concluded that the test on biodegradability is acceptable although the whole report with all raw data was not provided. The substance does not fulfil the P criterion.

With respect to the toxicity testing without a definitive water solubility, it is not possible to judge what level causes immobility or fish mortality. In the daphnid test, tests solutions were prepared via dilution of the highest concentrated solution. This could be only considered as valid if the water solubility was > 25 mg/l in this case. Industry provided assurances that the study for determining the aquatic toxicity for daphnids was performed according to OECD 202 (including concentration control analysis) and under GLP conditions. In this test an aqueous extract was tested and the resulting EC50 based on analytically determined values is 1.3 mg/L. Therefore, the substance does not fulfil the T criterion.

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phosphorodithioic acid, S, S’-methylene O,O,O’,O’-tetraethyl ester (CAS No. 563-12-2) – ethion

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not inherently biodegradable (20-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

[1,1'-biphenyl]-4,4'-diamine, 3,3'-dichloro-, dihydrochloride (CAS No. 612-83-9)

Evaluation by the IGE

Recommended for deselection on the basis of both persistence and bioaccumulation data. As the NSDB denominator is 5, this means that the half life is less than 10 days. The QSAR-DK using EPIWIN

3.02 indicates a low bio-concentration factor of 59. The ECB existing chemicals TP280 indicated a BCF of 507. The substance fulfils neither the P nor the B criteria.

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benzenamine, 2,3,4,5-tetrachloro- (CAS No. 634-83-3)

Evaluation by the IGE

Recommended for deselection on the basis of bioaccumulation data. The QSAR-DK using EPIWIN 3.02 indicates a low bio-concentration factor of 389. The substance does not fulfil the B criteria.

1-phenanthrenemethanol, 1,2,3,4,4a,4b,5,6,10,10a-decahydro-1,4a-dimethyl-7-(1-methylethyl)-, [1R-(1.alpha.,4a.beta.,4b.alpha.,10a.alpha.)]- (CAS No. 666-84-2)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

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phosphorodithioic acid, S-[[(4-chlorophenyl)thio]methyl]O,O-diethyl ester (CAS No. 786-19-6) – carbophention

Evaluation by the IGE

The QSAR-DK: Syracuse version of H. Loonen's Simca Fragment linear MITI model calculation led to the initial assessment "not readily biodegradable (20-50%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

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phenanthrene, 9-chloro- (CAS No. 947-72-8)

Evaluation by the IGE

As BIOWIN3 = 2.5226 is above the threshold of 2.2 and the QSAR-DK concluded from BIOWIN1 and BIOWIN3 indicates that the substance is inherently biodegradable more than 70%, the substance is considered as non persistent. The substance does not fulfil the P criterion.

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phosphoric acid, tris(methylphenyl) ester (CAS No. 1330-78-5) – tricresylphosphate

Evaluation by the IGE

Biodegradation and bioaccumulation data of existing chemicals (based on the CSCL Japan. Ed. by Chemicals Inspection & Testing Institute Japan, Tokyo, Japan Chemical Industry Ecology-Toxicology & Information Center (JETOC), 1992) led to the initial assessment "not readily biodegradable (20-70%)" as stated in the fact sheet. As BIOWIN3= 2.3774 is above the threshold of 2.2, BIOWIN2=1.000 is above the threshold of 0.5 and QSAR-DK concluded from BIOWIN1 and BIOWIN3 indicates that the substance is inherently biodegradable (more than 70%), the combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

1,1'-biphenyl, 4,4'-dichloro- (CAS No. 2050-68-2)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to an initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

1,4-benzenediamine, N,N'-bis(1,4-dimethylpentyl)- (CAS No. 3081-14-9)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

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stannane, tributyl(1-oxododecyl)oxy- (CAS No. 3090-36-6) – tributyltin laurate

Evaluation by the IGE

The substance was initially assessed as being "not readily biodegradable (20-50%)", (biodegradation and bioaccumulation data of existing chemicals based on the CSCL Japan. Ed. by Chemicals Inspection & Testing Institute Japan, Tokyo, Japan Chemical Industry Ecology-Toxicology & Information Center (JETOC), 1992) as stated in the fact sheet. The NSDB denominator leads to the conclusion that the substance does not fulfil the P criterion.

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cyclohexane, (1,1-dimethylethyl)- (CAS No. 3178-22-1)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criteria.

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benzenamine, 2,3,5,6-tetrachloro- (CAS No. 3481-20-7)

Evaluation by the IGE

Recommended for deselection on the basis of bioaccumulation data. The QSAR-DK using EPIWIN 3.02 indicates a low bio-concentration factor of 288. The substance does not fulfil the B criterion.

1,4-pentadien-3-ol, 3-methyl-1-(2,6,6-trimethyl-1-cyclohexen-1-yl)- (CAS No. 5208-93-5) – vinyl-.beta.-ionol

Evaluation by the IGE

Test results on toxicity provided by industry were all obtained either with a solubilising agent or determined under non GLP conditions. In order to challenge the persistence criterion industry offered voluntarily to conduct a biodegradation study prior to SPS 2003. The EU technical meeting was contacted for advice on how to use the absence of toxic effects in acute tests at concentrations above the water solubility for the assessment of the toxicity criterion. EU-TM advised that expert judgement would need to be applied on a substance-by-substance basis. However, the new GLP

study (OECD 301B) showed biodegradability (although not readily biodegradable) at half life lower than the OSPAR P criterion. The substance does not fulfil the P criterion.

2-butenoic acid, 2-(1-methylheptyl)-4,6-dinitrophenyl ester (CAS No. 6119-92-2)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

1,6,10-dodecatrien-3-ol, 3,7,11-trimethyl- (CAS No. 7212-44-4) – nerolidol

Evaluation by the IGE

A study report on biodegradability provided by industry was accepted although the whole report with all raw data was not provided. The substance does not fulfil the P criterion.

Industry also provided values from the environmental effects database (EEDB obtained via contact point of the EPA-AQUIRE database) containing data on acute toxicity on fish and daphnids but no conclusion was drawn with respect to the toxicity values.

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bromperidol (CAS No. 10457-90-6)

Evaluation by the IGE

Recommended for deselection on the basis of bioaccumulation data. The QSAR-DK using EPIWIN 3.02 indicates a low bio-concentration factor of 76. The substance does not fulfil the B criterion.

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cedrene (CAS No. 11028-42-5)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD

(combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

1-phenanthrenemethanol, tetradecahydro-1,4a-dimethyl-7-(1-methylethyl)- (CAS No. 13393-93-6) – abietyl alcohol, tetrahydro-

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

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heptane, 2,2,4,6,6-pentamethyl- (CAS No. 13475-82-6)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

1,4-benzenediamine, N-(1-methylheptyl)-N'-phenyl- (CAS No. 15233-47-3)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

9,10-anthracenedione, 1,4-bis(butylamino)- (CAS No. 17354-14-2) – C.I. Solvent Blue 35

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

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silane, trichloro(2,4,4-trimethylpentyl)- (CAS No. 18379-25-4)

Evaluation by the IGE

As BIOWIN3 = 2.4397 is above the threshold of 2.2 and the QSAR-DK concluded from BIOWIN1 and BIOWIN3 indicates that the substance is inherently biodegradable more than 70%, the substance is considered as non persistent. The substance does not fulfil the P criterion.

1-phenanthrenecarboxylic acid, tetradecahydro-1,4a-dimethyl-7-(1-methylethyl)-, methyl ester, [1R-(1.alpha.,4a.beta.,4b.alpha.,7.beta.,8a.beta.,10a.alpha.)]- (CAS No. 19941-28-7) – methyl tetrahydroabietate

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. A RIFM Private Communication of 1999 states that a biodegradability of 9.8-12.6 % was reached after 28 days in a OECD 301C test. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

3-cyclohexene-1-methanol, alpha,4-dimethyl-alpha-(4-methyl-3-pentenyl)-, [S-(R1,R1)] (CAS No. 23089-26-1) – levomenol

Evaluation by the IGE

Levomenol is one enantiomere of the racemic mixture of bisabolol. Therefore the study reports for bisabolol are relevant. For bisabolol industry provided study reports on biodegradability and acute toxicity tests on fish and daphnids challenging the non fulfilment of the P and T criteria provided by industry. It was concluded that the test on biodegradability is acceptable although the whole report with all raw data was not provided. The substance does not fulfil the P criterion.

The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) also leads to the conclusion that the substance does not fulfil the P criterion.

3-cyclohexene-1-methanol, .alpha.,4-dimethyl-.alpha.-(4-methyl-3-pentenyl)-, (R*,R*)-(.+-.)- (CAS No. 25428-43-7)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

2H-1-benzopyran-2-one, 3-[3-(4'-bromo[1,1'-biphenyl]-4-yl)-3-hydroxy-1-phenylpropyl]-4-hydroxy- (CAS No. 28772-56-7) – bromadiolone

Evaluation by the IGE

The substance was initially selected based on the initial assessment "not readily biodegradable (20-50%)" (KemI Report 9/88. Solna, Sweden, Nationals Chemicals Inspectorate, 1988 (in Swedish)) as stated in the fact sheet. The NSDB Denominator lead to the conclusion that the substance does not fulfil the P criterion.

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ethanone, 1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-3a,7-methanoazulen-5-yl)-, [3R-(3alpha, 3abeta,7beta,8aalpha)] (CAS No. 32388-55-9) – 9-Acetyl-8-cedreme

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

2-hexene, 3,4,5,5-tetramethyl- (CAS No. 39083-38-0)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

2-butenoic acid, 2(or 4)-isooctyl-4,6(or 2,6)-dinitrophenyl ester (CAS No. 39300-45-3) – dinocap

Evaluation by IGE

Water-sediment studies with the radio-labelled substance shows shorter half life than previously known, and that the OSPAR P criterion is not met. The metabolites were further degraded and bound to the sediment before being mineralised. The substance does not fulfil the P criterion.

1,6,10-dodecatrien-3-ol, 3,7,11-trimethyl-, (E)- (CAS No. 40716-66-3)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

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cypermethrin (CAS No. 52315-07-8) – cypermethrin

Evaluation by IGE

The selection was originally based on QSAR data. Water-sediment studies showed that the radio-labelled substance was rapidly degraded under both aerated and static conditions with a half life shorter than the OSPAR P criterion. The hydrolysis products are further degraded and not toxic. The substance does not fulfil the P criterion.

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cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, (3-phenoxyphenyl)methyl ester (CAS No. 52645-53-1) – permethrin

Evaluation by the IGE

The substance was initially selected based on a half life of 20 days (Linders et al., report no 679101014 RIVM), which does not fulfil the persistence criterion. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) and the NSDB denominator lead to ambiguous results. Water-sediment studies with the radio-labelled substance show enough evidence to presume that the substance is not persistent in natural seawater and therefore does not fulfil the OSPAR P criterion.

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cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester, [1R-[1.alpha.(S*),3.alpha.]]- (CAS No. 52918-63-5) – deltamethrin

Evaluation by IGE

Water-sediment studies with the radio-labelled substance show enough evidence to presume that the substance is not persistent in natural seawater and therefore does not fulfil the OSPAR P criterion. The results of pond studies carried out under realistic conditions showed lower BCFs than the OSPAR B criterion. The substance does not fulfil the P and B criteria.

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oxiranecarboxylic acid, 3-methyl-3-[4-(2-methylpropyl)phenyl]-, 1-methylethyl ester (CAS No. 53500-83-7)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

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ethanone, 1-[1,6-dimethyl-4-(4-methyl-3-pentenyl)-3-cyclohexen-1-yl]- (CAS No. 57499-57-7)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

heptane, 2,2,4,4,6-pentamethyl- (CAS No. 62199-62-6)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

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hexanoyl chloride, 2-[2,4-bis(1,1-dimethylpropyl)phenoxy]- (CAS No. 63059-55-2)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

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cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester, [1-alpha.(S*),3.alpha.]-(.+-.)- (CAS No. 67375-30-8) – alphacypermethrin

Evaluation by the IGE

A comprehensive report on the environmental fate and aquatic ecotoxicological data was developed within the framework of Council Directive 91/414/EEC. In natural water sediment systems radio-labelled alphacypermethrin metabolised very fast with a half life below 50 days (mineralisation to CO2). The substance does not fulfil the P criterion.

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ethanone, 1-(2-hydroxy-5-tert-nonylphenyl)-, oxime (CAS No. 68517-09-9)

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. The combination of QSAR derived data as recommended in the TGD

(combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

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cyclohexanol, (1,7,7-trimethylbicyclo[2.2.1]hept-2-yl)- (CAS No. 68877-29-2) – bornylcyclohexanol

Evaluation by the IGE

The QSAR-DK: BIOWIN1 calculation led to the initial assessment "not readily biodegradable (50-70%)" as stated in the fact sheet. A RIFM Private Communication of 1999 states that a biodegradability of 9.8-12.6 % was reached after 28 days in a OECD 301C test. The combination of QSAR derived data as recommended in the TGD (combination of BIOWIN2/Mitideg2/BIOWIN3 models) leads to the conclusion that the substance does not fulfil the P criterion.

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dodecene, branched (CAS No. 97280-83-6) – isododecene

Evaluation by IGE

BIOWIN model assessments of different isomers of the technical mixture isododecene showed that isododecene is not persistent. This is supported by the modified Sturm test (OECD guideline 302 B) on degradability of isooctene (di-n-butene), which has a similar structure in terms of branching and double bound to isododecene, because both olefins are produced by the same production process (di-, and triimerizing of n-butenes (but-1-ene and but-2-ene). A test report on the acute immobilisation test of Daphnia magna by triisobuten (isooctene) was accepted on the basis that a mixture of C12 and C8 substances had been tested and that the test is valid. The test result can be read as NOECimmobilisation =3.10 mg/l and EC50 (48 h, immobilisation) > 3.10 mg/l, which is at the limit of test-conditional water solubility. The tested substance is therefore not toxic for Daphnia. The substance does not fulfil the P and T criteria.

1,3,4-Oxadiazol-2(3H)-one, 3-[2,4-dichloro-5-(1-methylethoxy)phenyl]-5-(1,1-dimethylethyl)- (CAS No. 19666-30-9) – oxidiazon

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Evaluation by the IGE (RS)-alpha-cyano-3-phenoxybenzyl (RS)-2-(4-chlorophenyl)-3-methylbutyrate (CAS No. 51630-58-1) – fenvalerate

Evaluation by the IGE

In new studies the overall half-life in water-sediment systems at 20 oC was shown to range from 20 to 40 days. Major metabolites were found to be decreasing towards the end of the study and BCFs calculated for these metabolites indicate that they are not liable to bioaccumulate. The substance does not meet the P criterion.

O-2,6-dichloro-4-methylphenyl O,O-dimethyl phosphorothioate (CAS No. 57018-04-9) – tolclofos-methyl

Evaluation by IGE

New studies showed that the overall half-life in water/sediment systems at 20 oC was 15-16 days. The primary metabolite also degraded significantly during the later stages of the incubation. Thus tolclofos-methyl does not meet the P criterion. The bioconcentration study indicated that BCF for tolclofos-methyl and its metabolites were below the cut-off value of 500, but these results were not conclusive.

(RS)-alpha-cyano-3-phenoxy-benzyl 2,2,3,3-tetramethylcyclopropane carboxylate (CAS No. 64257-84-7) – fenpropathrin

Evaluation by IGE

In three new water/sediment system studies the overall half-life at 20 oC was shown to be between 23 and 47 days. Major metabolites were found to be decreasing towards the end of the study and BCFs calculated for these metabolites indicate that they are not liable to bioaccumulate. Fenpropathrin does not meet the P criterion.

(S)-alpha-cyano-3-phenoxybenzyl (S)-2-(4-chlorophenyl)-3-methylbutyrate (CAS No. 66230-04-4) – esfenvalerate

Evaluation by IGE

Esfenvalerate is one of four optical isomers of fenvalerate. In two new water/sediment studies the overall half-life at 10 oC was between 65-79 days. Comparative information on the rates of biological degradation in aerobic soil allowed the conclusion that the biodegradability of esfenvalerate is similar to or perhaps even slightly faster than that of fenvalerate, for which the half-life in water/sediment systems at 20 oC had been shown to range from 20 to 40 days. Thus esfenvalerate does not meet the P criterion.

Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, cyano(4-fluoro-3-phenoxyphenyl)methyl ester (CAS No. 68359-37-5) – cyfluthrin

Evaluation by IGE

New documentation showed that cyfluthrin does not accumulate in water or sediment and that it appears to degrade rapidly in sediment. It does not fulfil the P criterion, and is borderline with regard to the B criterion.

Benzenamine, 2-chloro-6-nitro-3-phenoxy- (CAS No. 74070-46-5) – aclonifen

Evaluation by IGE

Detailed study reports showed that aclonifen does not fulfil the P criterion in the aqueous phase, but that unextraxtable residues in the sediment are highly persistent. The bound residues in the sediment were shown to be metabolites formed by microbial transformation of aclonifen, rather than binding of the parent compound itself. A chironomid toxicity test using spiked sediment led to the conclusion that the bound residues did not generate a concern for harm. It was therefore concluded that the substance does not fulfil the P criterion.

1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro- (CAS No. 77-47-4) – hexachlorocyclopentadiene (HCCP)

Evaluation by the IGE and HSC 2005

HSC 2005 considered the information of the risk assessment report (RAR) prepared under the EU Council Regulation (EEC) 793/93, the Existing Substances Regulation, which was concluded after the adoption of the Background Document for HCCP. The RAR showed a half-life for hydrolysis at 12°C of 13,9 days and a bioconcentration factor less than 11. Thus the P and the B criteria are not fulfilled. HSC 2005 concluded that based on the strict use of the DYNAMEC criteria, the substance would not have been selected today. Furthermore there was no reason for selection of HCCP under the Safety Net Procedure. There is no evidence of widespread occurrence in the marine environment, and HCCP is not suspected of endocrine disruptive effects. Based on this the OSPAR Commission concluded to delete the substance from the OSPAR List of Chemicals for Priority Action and to update the List of Substances of Possible Concern accordingly.

Benzene, 1-(1,1-dimethylethyl)-4-methyl- (CAS No. 98-51-1) – 4-*tert*-butyltoluene

Evaluation by the IGE and HSC 2005

The substance was selected as a priority substance partly based on QSAR data. The substance does not meet the T acute criterion, as shown in the OSPAR fact sheet and Background Document published in 2003. Based on the strict use of the DYNAMEC criteria, the substance would not have been selected today, since non-fulfilment of the T acute criterion is sufficient to conclude that the substance is not a PBT substance. The Background Document describes 4-tert-butyltoluene as an intermediate used in closed systems and it is therefore not considered to be a risk for the marine environment. Furthermore it is not suspected to have endocrine disrupting effects. Based on this the OSPAR Commission concluded to delete the substance from the OSPAR List of Chemicals for Priority Action and to update the List of Substances of Possible Concern accordingly.

Hexamethyldisiloxane (HMDS) (CAS No. 107-46-0)

Evaluation by the IGE

HMDS was prioritised based on information in the EC/ECB existing substances evaluation, showing that it fulfilled the OSPAR PBT criteria. According to EU TGD criteria only the P criterion is likely to be fulfilled. IGE examined a new study on hydrolysis of HMDS submitted by the manufacturer. IGE concluded that the study showed that the P criterion was not fulfilled and that the hydrolysis products would evaporate and photo-oxidise. IGE considered that the monitoring data from the Background Document did not give a concern that would warrant any measures by OSPAR. Based on this the OSPAR Commission concluded that HMDS should be deselected.

Phosphine, triphenyl- (CAS No. 603-35-0) – triphenylphosphine

Evaluation by the IGE and HSC 2005

Based on the information in the Background Document for triphenylphosphine, which was published in 2003, it was concluded that the substance does not meet the T acute criterion. Based on a new study evaluated by the ECB PBT working group, HSC concluded that the B-criterion is not met either. The substance is an intermediate used in closed systems and it is therefore not considered to be a risk for the marine environment. Furthermore it is not suspected to have endocrine disrupting effects. Based on this the OSPAR Commission concluded to delete the substance from the OSPAR List of Chemicals for Priority Action and to update the List of Substances of Possible Concern accordingly.

Pendimethalin (CAS No. 40487-42-1)

Evaluation by IGE

Pendimethalin was originally selected since it fulfilled the PBT criteria. The P criterion was based on QSAR data. The producer supplied reports from new studies on degradation and effects in sediments in fresh water. The IGE concluded that the studies showed that pendimethalin was not meeting the P criterion, that no toxic effects on sediment dwelling organisms were demonstrated for the degradation products and bound residues, and that there was no evidence of risk to the marine environment leading to equivalent concern and that pendimethalin should therefore be deselected from the List of Substances of Possible Concern.

Fenpropathrin (CAS No. 39515-41-8)

Evaluation by IGE

The IGE recalled its evaluation in 2005 of three water/sediment systems studies in which the overall half-life at 20 oC was shown to be between 23 and 47 days. Major metabolites were found to be decreasing towards the end of the study and BCFs calculated for these metabolites indicate that they are not liable to bioaccumulate. The IGE had concluded that fenpropathrin (CAS No. 64257-84-7) does not meet the P criterion. Based on the newly submitted information that both listed CAS numbers for fenpropathrin were denoting the same substance, the IGE concluded that the decision by HSC in 2005 to deselect CAS No. 64257-84-7 implied that also CAS No. 39515-41-8 should be removed from the List of Substances of Possible Concern.

Propaquizafop (CAS No. 111479-05-1)

Evaluation by IGE

IGE assessed both the parent molecule and the hydrolysis product propaquizafop acid for PBT properties. The available experimental studies indicated that the T-criterion was fulfilled and that the B-criterion was just above the cut-off value applied by OSPAR. However, the rapid depuration reduced the concern for bioaccumulation. The key issue in the assessment of persistence of propaquizafop was the character of the bound residues which formed during the biodegradation test using a water-sediment system. The ample information on metabolites that was acquired in the study, the demonstration of considerable mineralization, evidence that bound residues originated from a non-toxic metabolite, and evidence that some radio-labeled carbon had ended up in bacteria and therefore could be biodegraded, was considered to be a sufficient basis for reasonably ruling out

a significant potential toxic effect of the bound residues. On this basis, IGE concluded that propaquizafop did not fulfill the P-criterion and therefore was not PBT according to the OSPAR criteria, and since the substance did not give reason for an equivalent level of concern, IGE recommended deselection from the List of Substances of Possible Concern.

TBBPA-DBPE (CAS No. 21850-44-2)

Evaluation by IGE

IGE concluded that there was sufficient evidence that the B- and T-criterion were not fulfilled. In view of recent experience with other brominated flame retardants, in particular decabromodiphenylether (DBDE), giving rise to an equivalent level of concern as a PBT-substance, IGE examined additional toxicological studies. IGE concluded that the available scientific evidence was insufficient to support conclusions on ecotoxic properties of the substance, and too limited to justify “equivalent” level of concern for keeping TBBPA-DBPE selected.

Bifenox (CAS No. 42576-02-3)

Evaluation by IGE

Bifenox does not fulfil the P criterion, but there was a concern about the bound residues of bifenox metabolites in the sediment. Further studies showed that none of the metabolites of bifenox fulfilled the T criterion. It was concluded that even in the case that bound residues might revert under certain conditions to free bifenox metabolites, no significant harmful effects were to be expected.

Phthalates DINP (CAS No 68515-48-0 and 28553-12-0) and DIDP (CAS No 68515-49-1 and 26761-40-0)

Evaluation by IGE

DINP and DIDP are not PBT substances according to OSPAR DYNAMEC or EU-TGD criteria and there is no indication of potential for endocrine disruption. Both substances have a potential for food chain transfer in marine mammals but their current use patterns and concentrations in the environment suggest that no long-term effects and no endocrine disrupting effect in the aquatic environment are expected. The IGE concluded that DIDP should be removed from the List of Chemicals for Priority

Action (DIDP was never placed on the List of Substances of Possible concern) and that DINP should be removed from both lists.