

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 09.03.2020

V- 1.0

Revision: 04.03.2020

**SECTION 1: Identification of the substance/mixture and of the company/
undertaking****1.1 Product identifier****Trade name: RADEX 2K VHS Clearcoat, Iaka****1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses: professional use.

Application of the substance / the mixture Clear coating material, Varnish**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

RADEX-Europe Ltd.

Uriekstes iela 3, Riga

LV-1005, Latvia

Tel: +371 67387778

Fax: +371 67387789

info@radex-europe.lv

Further information obtainable from: info@radex-europe.lv**1.4 Emergency telephone number:** Tel: +371 67387778 (9:00 – 18:00)**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

GHS02

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS09

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H336 May cause drowsiness or dizziness.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS02 GHS07 GHS09

Signal word Warning

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Hazard-determining components of labelling:

n-butyl acetate

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-

pentamethyl-4-piperidyl sebacate

pentaerythritol tetrakis(3-mercaptopropionate)

dibutylbis(dodecylthio)stannane

Hazard statements

H226 Flammable liquid and vapour.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statementsP210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.

P261 Avoid breathing mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/
international regulations.**Additional information:**

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****3.2 Chemical characterisation: Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
CAS: 123-86-4 EINECS: 204-658-1 Reg.nr.: 01-2119485493-29	n-butyl acetate Flam. Liq. 3, H226; STOT SE 3, H336	10-<25%
CAS: 763-69-9 EINECS: 212-112-9 Reg.nr.: 01-2119463267-34	ethyl 3-ethoxypropionate Flam. Liq. 3, H226	5-15%
CAS: 108-10-1 EINECS: 203-550-1 Reg.nr.: 01-2119473980-30	4-methylpentan-2-one Flam. Liq. 2, H225; Acute Tox. 4, H332; Eye Irrit. 2, H319; STOT SE 3, H335	1-7.5%

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CAS: 65-85-0 EINECS: 200-618-2 Reg.nr.: 01-2119455536-33	Benzoic acid STOT RE 1, H372; Eye Dam. 1, H318; Skin Irrit. 2, H315	1-2.5%
List no.: 915-687-0 Reg.nr.: 01-2119491304-40	Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1A, H317	0.1-<1%
CAS: 108-65-6 EINECS: 203-603-9 Reg.nr.: 01-2119475791-29	2-methoxy-1-methylethyl acetate Flam. Liq. 3, H226; STOT SE 3, H336	0.1-<1%
CAS: 7575-23-7 EINECS: 231-472-8 Reg.nr.: 01-2119486981-23	pentaerythritol tetrakis(3-mercaptopropionate) Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10); Acute Tox. 4, H302; Skin Sens. 1A, H317	0.1-<0.5%
CAS: 1185-81-5 EINECS: 214-688-7 Reg.nr.: 01-2119841260-50	dibutylbis(dodecylthio)stannane Muta. 2, H341; Repr. 1B, H360; STOT RE 1, H372; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H312; Skin Irrit. 2, H315; Skin Sens. 1, H317	0.1-<0.5%
CAS: 110-43-0 EINECS: 203-767-1 Reg.nr.: 01-2119902391-49	heptan-2-one Flam. Liq. 3, H226; Acute Tox. 4, H302; Acute Tox. 4, H332; STOT SE 3, H336	0.1-<1%

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.

In case of irregular breathing or respiratory arrest provide artificial respiration.

Take affected persons out of danger area and lay down.

After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing agents:**CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**For safety reasons unsuitable extinguishing agents:** Water with full jet**5.2 Special hazards arising from the substance or mixture**

Can form explosive gas-air mixtures.

Formation of toxic gases is possible during heating or in case of fire.

Carbon monoxide and carbon dioxide

5.3 Advice for firefighters**Protective equipment:**

Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion gases.

Additional information

Cool endangered receptacles with water spray.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources.

Avoid contact with the eyes and skin.

6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Do not flush with water or aqueous cleansing agents.

Dispose of the material collected according to regulations.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Do not eat, drink, smoke or sniff while working.

Do not allow to enter sewers/ surface or ground water.

Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

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Fumes can combine with air to form an explosive mixture.

7.2 Conditions for safe storage, including any incompatibilities**Storage:****Requirements to be met by storerooms and receptacles:**

Store only in the original receptacle.

Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidising agents.

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in a well ventilated area.

7.3 Specific end use(s) No further relevant information available.**SECTION 8: Exposure controls/personal protection****Additional information about design of technical facilities:** No further data; see item 7.**8.1 Control parameters****Ingredients with limit values that require monitoring at the workplace:****123-86-4 n-butyl acetate**

WEL (Great Britain)	Short-term value: 966 mg/m ³ , 200 ppm Long-term value: 724 mg/m ³ , 150 ppm
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108-10-1 4-methylpentan-2-one

WEL (Great Britain)	Short-term value: 416 mg/m ³ , 100 ppm Long-term value: 208 mg/m ³ , 50 ppm Sk, BMGV
IOELV (EU)	Short-term value: 208 mg/m ³ , 50 ppm Long-term value: 83 mg/m ³ , 20 ppm

108-65-6 2-methoxy-1-methylethyl acetate

WEL (Great Britain)	Short-term value: 548 mg/m ³ , 100 ppm Long-term value: 274 mg/m ³ , 50 ppm Sk
IOELV (EU)	Short-term value: 550 mg/m ³ , 100 ppm Long-term value: 275 mg/m ³ , 50 ppm Skin

110-43-0 heptan-2-one

WEL (Great Britain)	Short-term value: 475 mg/m ³ , 100 ppm Long-term value: 237 mg/m ³ , 50 ppm Sk
IOELV (EU)	Short-term value: 475 mg/m ³ , 100 ppm Long-term value: 238 mg/m ³ , 50 ppm Skin

Regulatory information

WEL (Great Britain): EH40/2018

IOELV (EU): (EU) 2017/164

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DNELs		
123-86-4 n-butyl acetate		
Dermal	DNEL	7 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL	960 mg/m ³ (acute - systemic effects, workers) 960 mg/m ³ (acute - local effects, workers) 480 mg/m ³ (long-term - systemic effects, workers) 480 mg/m ³ (long-term - local effects, workers)
763-69-9 ethyl 3-ethoxypropionate		
Dermal	DNEL	102 mg/kg bw/day (long-term - systemic effects, workers)
	DNEL	102 mg/cm ² (long-term - local effects, workers)
Inhalative	DNEL	610 mg/m ³ (long-term - systemic effects, workers) 610 mg/m ³ (long-term - local effects, workers)
108-10-1 4-methylpentan-2-one		
Dermal	DNEL	11.8 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL	208 mg/m ³ (acute - systemic effects, workers) 208 mg/m ³ (acute - local effects, workers) 83 mg/m ³ (long-term - systemic effects, workers) 83 mg/m ³ (long-term - local effects, workers)
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate		
Dermal	DNEL	2.5 mg/kg bw/day (acute - systemic effects, workers) 2.5 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL	2.35 mg/m ³ (acute - systemic effects, workers) 2.35 mg/m ³ (long-term - systemic effects, workers)
108-65-6 2-methoxy-1-methylethyl acetate		
Dermal	DNEL	153.5 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL	275 mg/m ³ (long-term - systemic effects, workers)
7575-23-7 pentaerythritol tetrakis(3-mercaptopropionate)		
Dermal	DNEL	3.4 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL	40.13 mg/m ³ (acute - local effects, workers) 2.39 mg/m ³ (long-term - systemic effects, workers) 40.13 mg/m ³ (long-term - local effects, workers)
110-43-0 heptan-2-one		
Dermal	DNEL	54.27 mg/kg bw/day (long-term - systemic effects, workers)
Inhalative	DNEL	1,516 mg/m ³ (acute - systemic effects, workers) 394.25 mg/m ³ (long-term - systemic effects, workers)
PNECs		
123-86-4 n-butyl acetate		
PNEC	0.18 mg/l (freshwater environment) 0.018 mg/l (marine environment) 0.36 mg/l (intermittent releases)	

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PNEC	35.6 mg/l (sewage treatment plants) 0.981 mg/kg (freshwater sediment environment)
763-69-9 ethyl 3-ethoxypropionate	
PNEC	0.0609 mg/l (freshwater environment) 0.00609 mg/l (marine environment) 0.609 mg/l (intermittent releases) 50 mg/l (sewage treatment plants)
PNEC	0.419 mg/kg (freshwater sediment environment) 0.048 mg/kg (soil)
108-10-1 4-methylpentan-2-one	
PNEC	0.6 mg/l (freshwater environment) 0.06 mg/l (marine environment) 1.5 mg/l (intermittent releases) 27.5 mg/l (sewage treatment plants)
PNEC	8.27 mg/kg (freshwater sediment environment) 0.83 mg/kg (marine sediment environment)
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	
PNEC	0.0022 mg/l (freshwater environment) 0.00022 mg/l (marine environment) 0.009 mg/l (intermittent releases)
PNEC	1.05 mg/kg (freshwater sediment environment) 0.11 mg/kg (marine sediment environment) 0.21 mg/kg (soil)
108-65-6 2-methoxy-1-methylethyl acetate	
PNEC	0.635 mg/l (freshwater environment) 0.0635 mg/l (marine environment) 6.35 mg/l (intermittent releases) 100 mg/l (sewage treatment plants)
PNEC	3.29 mg/kg (freshwater sediment environment) 0.329 mg/kg (marine sediment environment)
7575-23-7 pentaerythritol tetrakis(3-mercaptopropionate)	
PNEC	2.39 mg/l (sewage treatment plants)
PNEC	0.03 µg/l (freshwater environment) 0.0034 µg/l (marine environment) 0.34 µg/l (intermittent releases)
PNEC	1.02 µg/kg (freshwater sediment environment) 0.102 µg/kg (marine sediment environment) 0.184 µg/kg (soil)
110-43-0 heptan-2-one	
PNEC	0.0982 mg/l (freshwater environment)

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PNEC	0.00982 mg/l (marine environment)
	0.982 mg/l (intermittent releases)
	12.5 mg/l (sewage treatment plants)
	1.89 mg/kg (freshwater sediment environment)
	0.189 mg/kg (marine sediment environment)
	0.321 mg/kg (soil)

Ingredients with biological limit values:**108-10-1 4-methylpentan-2-one**

BMGV (Great Britain)	20 µmol/L Medium: urine Sampling time: post shift Parameter: 4-methylpentan-2-one
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Regulatory information BMGV (Great Britain): EH40/2011**Additional information:** The lists valid during the making were used as basis.**8.2 Exposure controls****Personal protective equipment:****General protective and hygienic measures:**

Ensure good ventilation/exhaustion at the workplace.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Keep ignition sources away - Do not smoke.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Do not eat or drink while working.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Filter A2/P2

Protection of hands:

Protective gloves

Check the permeability prior to each renewed use of the glove.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation (EN 374).

Material of gloves

Butyl rubber, BR

Nitrile rubber, NBR

PVA gloves

Recommended thickness of the material: $\geq 0,7$ mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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Penetration time of glove materialValue for the permeation: Level 6 \geq 480 min.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Tightly sealed goggles

Body protection: Protective work clothing**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Appearance:**

Form:	Fluid
Colour:	Colourless/ slightly yellow
Odour:	Characteristic
Odour threshold:	Not determined.

pH-value: Not applicable.**Change in condition**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.

Flash point: 25 °C**Flammability (solid, gas):** Not applicable.**Decomposition temperature:** Not determined.**Auto-ignition temperature:** Not determined.**Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.**Explosion limits:**

Lower:	1.2 Vol %
Upper:	8 Vol %

Vapour pressure at 20 °C: 8 hPa

Density at 20 °C:	1 g/cm ³
Vapour density	Not determined.
Evaporation rate	Not determined.

Solubility in / Miscibility with water:

Not miscible or difficult to mix.

Partition coefficient: n-octanol/water: Not determined.**Viscosity:****Dynamic:** Not determined.

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Kinematic:	Not determined.
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity No decomposition if used according to specifications.

10.2 Chemical stability No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

Reacts with alkali, amines and strong acids.

Reacts with oxidising agents.

Fumes can combine with air to form an explosive mixture.

10.4 Conditions to avoid Protect from heat and direct sunlight.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Formation of toxic gases is possible during heating or in case of fire.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

123-86-4 n-butyl acetate

Oral	LD50	10,760 mg/kg (rat)
Dermal	LD50	>14,000 mg/kg (rabbit)
Inhalative	LC50/4 h	23.4 mg/l (rat)

763-69-9 ethyl 3-ethoxypropionate

Oral	LD50	4,309 mg/kg (rat)
Dermal	LD50	4,080 mg/kg (rabbit)

108-10-1 4-methylpentan-2-one

Oral	LD50	2,080 mg/kg (rat)
Dermal	LD50	16,000 mg/kg (rab)
Inhalative	LC50/4 h	10-20 mg/l (rat)

65-85-0 Benzoic acid

Oral	LD50	1,700 mg/kg (rat)
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Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

Oral	LD50	3,230 mg/kg (rat)
Dermal	LD50	>3,170 mg/kg (rat)

108-65-6 2-methoxy-1-methylethyl acetate

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/6 h	4,345 mg/l (rat)

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7575-23-7 pentaerythritol tetrakis(3-mercaptopropionate)		
Oral	LD50	1,000-2,000 mg/kg (rat)
Inhalative	LC50/4 h	>3,363 mg/l (rat)
1185-81-5 dibutylbis(dodecylthio)stannane		
Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	1,000-2,000 mg/kg (rabbit)
110-43-0 heptan-2-one		
Oral	LD50	1,600 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	>16.7 mg/l (rat)

Primary irritant effect:**Skin corrosion/irritation** Based on available data, the classification criteria are not met.**Serious eye damage/irritation**

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**Germ cell mutagenicity** Based on available data, the classification criteria are not met.**Carcinogenicity** Based on available data, the classification criteria are not met.**Reproductive toxicity** Based on available data, the classification criteria are not met.**STOT-single exposure**

May cause drowsiness or dizziness.

STOT-repeated exposure Based on available data, the classification criteria are not met.**Aspiration hazard** Based on available data, the classification criteria are not met.**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:****123-86-4 n-butyl acetate**

LC50/96 h	18 mg/l (Pimephales promelas)
TT/16 h	115 mg/l (Pseudomonas putida)
EC50/48 h	44 mg/l (daphnia)
EC50/72 h	675 mg/l (algae)

763-69-9 ethyl 3-ethoxypropionate

LC50/96 h	60.9 mg/l (fish)
EC50/48 h	785 mg/l (Daphnia magna)
EC50/72 h	>114.86 mg/l (Pseudokirchnerella subcapitata)

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate

LC50/96 h	0.97 mg/l (fish)
EC50/3 h	>100 mg/l (microorganisms)
EC50/72 h	1.68 mg/l (Desmodesmus subspicatus)
EC50/24 h	20 mg/l (Daphnia magna)

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108-65-6 2-methoxy-1-methylethyl acetate	
LC50/96 h	>100 mg/l (fish)
EC50/48 h	>500 mg/l (Daphnia magna)
EC20/30 min	>1,000 mg/l (microorganisms)
EC50/72 h	>1,000 mg/l (Pseudokirchnerella subcapitata)
EC50	>100 mg/l (Pseudokirchnerella subcapitata) >100 mg/l (Pimephales promelas) >100 mg/l (Daphnia magna)
7575-23-7 pentaerythritol tetrakis(3-mercaptopropionate)	
LC50/96 h	0.034 mg/l (Oncorhynchus mykiss) (OECD 203)
EC50/48 h	>0.35 mg/l (Daphnia magna)
EC50	>0.65 mg/l (Desmodesmus subspicatus)
1185-81-5 dibutylbis(dodecylthio)stannane	
EC50/48 h	0.11 mg/l (Daphnia magna)
EC50/72 h	≥1.6 mg/l (Scenedesmus subspicatus)
110-43-0 heptan-2-one	
LC50/96 h	131 mg/l (Pimephales promelas)
EC50/72 h	98.2 mg/l (Pseudokirchnerella subcapitata)
12.2 Persistence and degradability	
123-86-4 n-butyl acetate	
Biodegradation	83 % (readily biodegradable) (OECD 301 D, 28 d, aerobic)
763-69-9 ethyl 3-ethoxypropionate	
Biodegradation	100 % (readily biodegradable) (CO2 Evolution Test, 28 d)
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	
Biodegradation	38 % (not readily biodegradable) (OECD 301 F, 28 d, aerobic)
108-65-6 2-methoxy-1-methylethyl acetate	
Biodegradation	100 % (readily biodegradable) (OECD 302 B, 8 d, aerobic)
7575-23-7 pentaerythritol tetrakis(3-mercaptopropionate)	
Biodegradation	26 % (not readily biodegradable) (OECD 301 B, 28 d, aerobic)
1185-81-5 dibutylbis(dodecylthio)stannane	
Biodegradation	0 % (not readily biodegradable) (OECD 301 F, 28 d, aerobic)
110-43-0 heptan-2-one	
Biodegradation	69 % (readily biodegradable) (OECD 310, 28 d, aerobic)
12.3 Bioaccumulative potential	
123-86-4 n-butyl acetate	
BCF	15.3 (-)
log Pow	2.3
763-69-9 ethyl 3-ethoxypropionate	
log Pow	1.35

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Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	
BCF	<9.7
108-65-6 2-methoxy-1-methylethyl acetate	
log Pow	0.56
7575-23-7 pentaerythritol tetrakis(3-mercaptopropionate)	
BCF	23.7
log Pow	3.03
12.4 Mobility in soil	
123-86-4 n-butyl acetate	
log Koc	1.27
763-69-9 ethyl 3-ethoxypropionate	
log Koc	1.52
Koc	32.78
Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate	
log Koc	5.31
Koc	204,400
108-65-6 2-methoxy-1-methylethyl acetate	
Koc	1.7
7575-23-7 pentaerythritol tetrakis(3-mercaptopropionate)	
log Koc	2.54
Koc	347

Additional ecological information:**General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Toxic for aquatic organisms

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue

08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
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Uncleaned packaging:**Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information**

14.1 UN-Number ADR, IMDG, IATA	UN1263
14.2 UN proper shipping name ADR IMDG, IATA	1263 PAINT PAINT
14.3 Transport hazard class(es) ADR	
	
Class	3
Label	3
IMDG, IATA	
	
Class	3
Label	3
14.4 Packing group ADR, IMDG, IATA	III
14.5 Environmental hazards: Marine pollutant (IMDG): Special marking (ADR):	Environmentally hazardous substance, liquid No Symbol (fish and tree)
14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number: Stowage Category	Warning: Flammable liquids. 30 F-E, S-E A
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
Transport/Additional information:	
ADR Limited quantities (LQ) Transport category Tunnel restriction code	5L 3 D/E

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IMDG	
Limited quantities (LQ)	5L
UN "Model Regulation":	UN 1263 PAINT, 3, III

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

Seveso category

E2 Hazardous to the Aquatic Environment

P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

Regulation (EU) No 649/2012		
1185-81-5	dibutylbis(dodecylthio)stannane	Annex I Part 1

National regulations:

Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H341 Suspected of causing genetic defects.

H360 May damage fertility or the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

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Classification according to Regulation (EC) No 1272/2008	
Flammable liquids	Bridging principles
Serious eye damage/eye irritation Skin sensitisation Specific target organ toxicity (single exposure) Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 DNEL: Derived No-Effect Level (REACH)
 PNEC: Predicted No-Effect Concentration (REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Flam. Liq. 2: Flammable liquids – Category 2
 Flam. Liq. 3: Flammable liquids – Category 3
 Acute Tox. 4: Acute toxicity - inhalation – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 Skin Sens. 1: Sensitisation - Skin. Hazard Category 1
 Skin Sens. 1A: Sensitisation - Skin. Hazard Category 1A
 Muta. 2: Germ cell mutagenicity. Hazard Category 2
 Repr. 1B: Reproductive toxicity. Hazard Category 1B
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
 Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Sources European Chemicals Agency, <http://echa.europa.eu/>

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