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SAFETY DATA SHEET

SPAREX RM

SECTION 1: Identification of the substance/mixture and of the compa	ny/
undertaking	

undertaking			
.1 Product identifier			
Product name	: SPAREX RM		
Product type	: Liquid.		
Other means of identification	: Not available.		
.2 Relevant identified uses	of the substance or mixture	and uses advised against	
	Identif	ied uses	
Use in coatings - Topcoat			
e-mail address of person responsible for this SDS	:		

1.4 Emergency telephone number

Supplier

Telephone number :

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H336 STOT RE 1, H372 Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

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SECTION 2: Hazards identification

2.2 Label elements

Hazard pictograms









Signal word : Danger

Hazard statements : Flammable liquid and vapour. Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction. May cause drowsiness or dizziness.

Causes damage to organs through prolonged or repeated exposure.

Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention: Wear protective gloves. Wear eye or face protection. Wear protective clothing.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking. Avoid release to the environment. Do not breathe vapour.

Response : IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF

ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water.

Storage : Store locked up.

Disposal : Dispose of contents and container in accordance with all local, regional, national

and international regulations.

Hazardous ingredients: Naphtha (petroleum), hydrodesulfurized heavy

2-butanone oxime

cobalt bis(2-ethylhexanoate)

Supplemental label

elements

: Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and

articles

: Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant

fastenings

: Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Other hazards which do not result in classification

: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

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SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
Naphtha (petroleum), hydrodesulfurized heavy; Low boiling point hydrogen treated naphtha; [A complex combination of hydrocarbons obtained from a catalytic hydrodesulfurization process. It consists of hydrocarbons having carbon numbers predominantly in the range of C7 through C12 and boiling in the range of approximately 90°C to 230°C (194°F to 446°F).]	REACH #: 01-2119458049-33 EC: 265-185-4 CAS: 64742-82-1 Index: 649-330-00-2	≥10 - ≤25	Flam. Liq. 3, H226 STOT SE 3, H336 STOT RE 1, H372 (inhalation) Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1] [2]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - ≤18	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304	[1] [2]
2-methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	≤10	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≤5	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≤3	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	[1] [2]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≤3	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
Alkylammonium salt (72243/00/2008.0051, Germany)	EC: Self classification CAS: 398475-96-2	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
1,2,4-trimethylbenzene	REACH #: 01-2119472135-42 EC: 202-436-9 CAS: 95-63-6 Index: 601-043-00-3	≤1.7	Flam. Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411	[1] [2]
2-ethylhexanoic acid, zirconium salt	REACH #: 01-2119979088-21 EC: 245-018-1 CAS: 22464-99-9	≤1	Repr. 2, H361fd (Fertility and Unborn child)	[1] [2]

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SECTION 3: Composition/information on ingredients

2-butanone oxime	REACH #: 01-2119539477-28	<1	Acute Tox. 4, H312 Eye Dam. 1, H318	[1]
	EC: 202-496-6 CAS: 96-29-7		Skin Sens. 1, H317 Carc. 2, H351	
	Index: 616-014-00-0		Odi 6. 2, 1100 i	
mesitylene	REACH #: 01-2119463878-19 EC: 203-604-4 CAS: 108-67-8 Index: 601-025-00-5	<1	Flam. Liq. 3, H226 STOT SE 3, H335 Aquatic Chronic 2, H411	[1] [2]
cobalt bis(2-ethylhexanoate)	REACH #: 01-2119524678-29 EC: 205-250-6 CAS: 136-52-7	≤0.3	Eye Irrit. 2, H319 Skin Sens. 1A, H317 Repr. 2, H361fd (Fertility and Unborn child) (oral) Aquatic Acute 1, H400 (M=1) Aquatic Chronic 3, H412	[1] [2]
toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≤0.1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361d (Unborn child) STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 3, H412	[1] [2]
2-(2-butoxyethoxy)ethanol	REACH #: 01-2119475104-44 EC: 203-961-6 CAS: 112-34-5 Index: 603-096-00-8	≤0.1	Eye Irrit. 2, H319	[1] [2]
benzene	REACH #: 01-2119447106-44 EC: 200-753-7 CAS: 71-43-2 Index: 601-020-00-8	<0.1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Muta. 1B, H340 Carc. 1A, H350 STOT RE 1, H372 Asp. Tox. 1, H304	[1] [2]
			See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

<u>Type</u>

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

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SECTION 4: First aid measures

4.1 Description of first aid measures

General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give

anything by mouth to an unconscious person. If unconscious, place in recovery

position and seek medical advice.

Eye contact: Remove contact lenses, irrigate copiously with clean, fresh water, holding the

eyelids apart for at least 10 minutes and seek immediate medical advice.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by

trained personnel.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and

water or use recognised skin cleanser. Do NOT use solvents or thinners.

Ingestion : If swallowed, seek medical advice immediately and show the container or label.

Keep person warm and at rest. Do NOT induce vomiting.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it

is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing

thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains 2-butanone oxime, cobalt bis(2-ethylhexanoate). May produce an allergic reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

See toxicological information (Section 11)

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing : Reco

: Recommended: alcohol-resistant foam, CO₂, powders, water spray.

Unsuitable extinguishing

media

: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

: Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

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SECTION 5: Firefighting measures

Hazardous combustion products

- : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.
- 5.3 Advice for firefighters

Special protective actions for fire-fighters

: Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

Special protective equipment for fire-fighters

: Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.

For emergency responders:

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and material for containment and cleaning up

: Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Preferably clean with a detergent. Avoid using solvents.

6.4 Reference to other sections

: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

: Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws. Do not allow to enter drains or watercourses.

Information on fire and explosion protection

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

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SECTION 7: Handling and storage

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

SECTION 8: Exposure controls/personal protection

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Naphtha (petroleum), hydrodesulfurized heavy	EU OEL (Europe, 2003).
	TWA: 575 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.
xylene	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed
	through skin.
	STEL: 441 mg/m³, 0 times per shift, 15 minutes.
	STEL: 100 ppm, 0 times per shift, 15 minutes.
	TWA: 220 mg/m³, 0 times per shift, 8 hours.
	TWA: 50 ppm, 0 times per shift, 8 hours.
2-methoxy-1-methylethyl acetate	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed
	through skin.
	STEL: 548 mg/m³ 15 minutes.
	TWA: 50 ppm 8 hours.
	TWA: 274 mg/m³ 8 hours.
	STEL: 100 ppm 15 minutes.
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed
	through skin.
	STEL: 552 mg/m³ 15 minutes.
	STEL: 125 ppm 15 minutes.
	TWA: 441 mg/m ³ 8 hours.
	TWA: 100 ppm 8 hours.
n-butyl acetate	EH40/2005 WELs (United Kingdom (UK), 12/2011).
	STEL: 966 mg/m³ 15 minutes.
	STEL: 200 ppm 15 minutes.
	TWA: 724 mg/m³ 8 hours.
	TWA: 150 ppm 8 hours.
1-methoxy-2-propanol	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed
	through skin.
	STEL: 560 mg/m³ 15 minutes.
	STEL: 150 ppm 15 minutes.
	TWA: 375 mg/m³ 8 hours.

1,2,4-trimethylbenzene EH40/2005 WELs (United Kingdom (UK), 12/2011).

TWA: 125 mg/m³ 8 hours. TWA: 25 ppm 8 hours.

TWA: 100 ppm 8 hours.

2-ethylhexanoic acid, zirconium salt EH40/2005 WELs (United Kingdom (UK), 12/2011).

STEL: 10 mg/m³, (as Zr) 15 minutes. TWA: 5 mg/m³, (as Zr) 8 hours.

mesitylene EH40/2005 WELs (United Kingdom (UK), 12/2011).

TWA: 125 mg/m³ 8 hours. TWA: 25 ppm 8 hours.

cobalt bis(2-ethylhexanoate) EH40/2005 WELs (United Kingdom (UK), 12/2011). Inhalation

sensitiser.

TWA: 0.1 mg/m³, (as Co) 8 hours.

toluene EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed

through skin.

STEL: 384 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 191 mg/m³ 8 hours. TWA: 50 ppm 8 hours.

2-(2-butoxyethoxy)ethanol EH40/2005 WELs (United Kingdom (UK), 12/2011).

TWA: 10 ppm 8 hours. STEL: 15 ppm 15 minutes. TWA: 67.5 mg/m³ 8 hours. STEL: 101.2 mg/m³ 15 minutes.

benzene EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed

through skin.

TWA: 1 ppm 8 hours.

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
Naphtha (petroleum),	DNEL	Short term	1300 mg/	Workers	Systemic
hydrodesulfurized heavy		Inhalation	m³		
	DNEL	Long term	840 mg/m ³	Workers	Local
		Inhalation			
	DNEL	Short term	1100 mg/	Workers	Local
		Inhalation	m³		
	DNEL	Short term	1200 mg/	Consumers	Systemic
		Inhalation	m³		
	DNEL	Long term	180 mg/m ³	Consumers	Local
		Inhalation			
	DNEL	Short term	640 mg/m ³	Consumers	Local
		Inhalation			
xylene	DNEL	Long term	221 mg/m ³	Workers	Systemic
		Inhalation			
	DNEL	Short term	442 mg/m ³	Workers	Systemic
		Inhalation			_

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	DNEL	Long term Inhalation	221 mg/m³	Workers	Local
	DNEL	Short term	442 mg/m³	Workers	Local
	DNEL	Inhalation Long term Dermal	212 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	65.3 mg/m³	Consumers	Systemic
	DNEL	Short term Inhalation	260 mg/m ³	Consumers	Systemic
	DNEL	Long term Inhalation	65.3 mg/m³	Consumers	Local
	DNEL	Short term Inhalation	260 mg/m ³	Consumers	Local
	DNEL	Long term Dermal	125 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	12.5 mg/ kg bw/day	Consumers	Systemic
2-methoxy-1-methylethyl acetate	DNEL	Long term Inhalation	275 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	550 mg/m ³	Workers	Local
	DNEL	Long term Dermal	796 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	33 mg/m³	Consumers	Systemic
	DNEL	Long term Inhalation	33 mg/m³	Consumers	Local
	DNEL	Long term Dermal	320 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	36 mg/kg bw/day	Consumers	Systemic
ethylbenzene	DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	293 mg/m ³	Workers	Local
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	15 mg/m³	Consumers	Systemic
	DNEL	Long term Oral	1.6 mg/kg bw/day	Consumers	Systemic
n-butyl acetate	DNEL	Long term Inhalation	300 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	600 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	300 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	600 mg/m ³	Workers	Local
	DNEL	Long term Dermal	11 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	11 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	35.7 mg/m³	Consumers	Systemic
	DNEL	Short term Inhalation	300 mg/m³	Consumers	Systemic
	DNEL	Long term Inhalation	35.7 mg/m³	Consumers	Local
	DNEL	Short term Inhalation	300 mg/m ³	Consumers	Local
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		DNEL	Long term Dermal	6 mg/kg	Consumers	Systemic
		DNEL	Short term Dermal	bw/day 6 mg/kg bw/day	Consumers	Systemic
		DNEL	Long term Oral	2 mg/kg bw/day	Consumers	Systemic
		DNEL	Short term Oral	2 mg/kg bw/day	Consumers	Systemic
	1-methoxy-2-propanol	DNEL	Long term Inhalation	369 mg/m³	Workers	Systemic
		DNEL	Short term Inhalation	553.5 mg/ m³	Workers	Systemic
		DNEL	Short term Inhalation	553.5 mg/ m³	Workers	Local
		DNEL	Long term Dermal	183 mg/kg bw/day	Workers	Systemic
		DNEL	Long term Inhalation	43.9 mg/m³	Consumers	Systemic
		DNEL	Long term Dermal	78 mg/kg bw/day	Consumers	Systemic
		DNEL	Long term Oral	33 mg/kg bw/day	Consumers	Systemic
	1,2,4-trimethylbenzene	DNEL	Long term Inhalation	100 mg/m³	Workers	Systemic
		DNEL	Short term Inhalation	100 mg/m³	Workers	Systemic
		DNEL	Long term Inhalation	100 mg/m³	Workers	Local
		DNEL	Short term Inhalation	100 mg/m³	Workers	Local
		DNEL	Long term Dermal	16171 mg/ kg bw/day	Workers	Systemic
		DNEL	Long term Inhalation	29.4 mg/m ³		Systemic
		DNEL	Short term Inhalation		Consumers	Systemic
		DNEL	Long term Inhalation		Consumers	Local
		DNEL	Short term Inhalation		Consumers	Local
		DNEL	Long term Dermal	9512 mg/ kg bw/day	Consumers	Systemic
		DNEL	Long term Oral	15 mg/kg bw/day	Consumers	Systemic
	2-ethylhexanoic acid, zirconium salt	DNEL	Long term Inhalation	32.97 mg/ m³	Workers	Systemic
		DNEL	Long term Dermal	6.49 mg/ kg bw/day	Workers	Systemic
		DNEL	Long term Inhalation	8.13 mg/m ³	Consumers	Systemic
		DNEL	Long term Dermal	3.25 mg/ kg bw/day	Consumers	Systemic
	2 hutanana avima	DNEL	Long term Oral	4.51 mg/ kg bw/day	Consumers	Systemic
	2-butanone oxime	DNEL	Long term Inhalation	9 mg/m ³	Workers	Systemic
		DNEL	Long term Inhalation	3.33 mg/m ³		Local
		DNEL	Long term Dermal Short term Dermal	1.3 mg/kg bw/day	Workers	Systemic Systemic
		DINEL	Short term Dermal	2.5 mg/kg bw/day	AAOIVG12	Systemic
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	O.O. p	orderial prote	• • • • • • • • • • • • • • • • • • • •		
	DNEL	Long term Inhalation	2.7 mg/m ³	Consumers	Systemic
	DNEL	Long term Inhalation	2 mg/m³	Consumers	Local
	DNEL	Long term Dermal	0.78 mg/ kg bw/day	Consumers	Systemic
	DNEL	Short term Dermal	1.5 mg/kg bw/day	Consumers	Systemic
mesitylene	DNEL	Long term Inhalation	100 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	100 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	100 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	100 mg/m ³	Workers	Local
	DNEL	Long term Dermal	16171 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	29.4 mg/m³	Consumers	Systemic
	DNEL	Short term Inhalation	29.4 mg/m³	Consumers	Systemic
	DNEL	Long term Inhalation	29.4 mg/m³	Consumers	Local
	DNEL	Short term Inhalation	29.4 mg/m ³	Consumers	Local
	DNEL	Long term Dermal	9512 mg/ kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	15 mg/kg bw/day	Consumers	Systemic
cobalt bis(2-ethylhexanoate)	DNEL	Long term Inhalation	0.2351 mg/ m ³	Workers	Local
	DNEL	Long term Inhalation	0.037 mg/ m³	Consumers	Local
	DNEL	Long term Oral	0.0276 mg/ kg bw/day	Consumers	Systemic
toluene	DNEL	Long term Inhalation	192 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	384 mg/m³		Systemic
	DNEL	Long term Inhalation	192 mg/m³		Local
	DNEL	Short term Inhalation	384 mg/m³	Workers	Local
	DNEL	Long term Dermal	384 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	56.5 mg/m ³	Consumers	Systemic
	DNEL	Short term Inhalation	226 mg/m ³		Systemic
	DNEL	Long term Inhalation		Consumers	Local
	DNEL	Short term Inhalation	226 mg/m ³		Local
	DNEL	Long term Dermal	226 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	8.13 mg/ kg bw/day	Consumers	Systemic
2-(2-butoxyethoxy)ethanol	DNEL	Long term Inhalation	67.5 mg/m³		Systemic
	DNEL	Long term Inhalation	67.5 mg/m ³	Workers	Local
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1					I I
	DNEL	Short term	101.2 mg/	Workers	Local
		Inhalation	m³		
	DNEL	Long term Dermal	83 mg/kg	Workers	Systemic
		· ·	bw/day		
	DNEL	Long term	40.5 mg/m ³	Consumers	Systemic
		Inhalation	_		
	DNEL	Long term	40.5 mg/m ³	Consumers	Local
		Inhalation			
	DNEL	Short term	60.7 mg/m ³	Consumers	Local
		Inhalation			
	DNEL	Long term Dermal	50 mg/kg	Consumers	Systemic
		5	bw/day		,
	DNEL	Long term Oral	5 mg/kg	Consumers	Systemic
		Ŭ	bw/day		
benzene	DNEL	Long term	1.9 mg/m ³	Workers	Systemic
		Inhalation	3		
		'			

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
kylene	Fresh water	0.327 mg/l	-
	Marine water	0.327 mg/l	-
	Sewage Treatment	6.58 mg/l	-
	Plant		
	Fresh water sediment	12.46 mg/kg dwt	_
	Marine water sediment	12.46 mg/kg dwt	-
	Soil	2.31 mg/kg dwt	_
2-methoxy-1-methylethyl acetate	Fresh water	0.635 mg/l	_
	Marine	0.0635 mg/l	_
	Sewage Treatment	100 mg/l	_
	Plant	100 1119/1	
	Fresh water sediment	3.29 mg/kg dwt	_
	Marine water sediment	0.329 mg/kg dwt	_
	Soil	0.29 mg/kg dwt	
ethylbenzene	Fresh water	0.29 mg/kg dwt	
et lyiberizerie	Marine water	0.01 mg/l	-
		9.6 mg/l	-
	Sewage Treatment	9.6 1119/1	-
	Plant	40.7 //	
	Fresh water sediment	13.7 mg/kg dwt	-
	Marine water sediment	1.37 mg/kg dwt	-
	Soil	2.68 mg/kg dwt	-
n-butyl acetate	Fresh water	0.18 mg/l	-
	Marine	0.018 mg/l	-
	Sewage Treatment Plant	35.6 mg/l	-
	Fresh water sediment	0.981 mg/kg dwt	-
	Marine water sediment	0.0981 mg/kg dwt	_
	Soil	0.0903 mg/kg dwt	
-methoxy-2-propanol	Fresh water	10 mg/l	_
meanery = propanier	Marine water	1 mg/l	_
	Sewage Treatment	100 mg/l	_
	Plant	100 mg/i	
	Fresh water sediment	52.3 mg/kg dwt	_
	Marine water sediment	5.2 mg/kg dwt	_
	Soil	4.59 mg/kg dwt	
1,2,4-trimethylbenzene	Fresh water	0.12 mg/l	
1,2,4-(1111)e(11)())e(12e(1e			-
	Marine water	0.12 mg/l	-
	Sewage Treatment Plant	2.41 mg/l	-
	Fresh water sediment	13.56 mg/kg dwt	-
	Marine water sediment	13.56 mg/kg dwt	-
	Soil	2.34 mg/kg dwt	-
2-ethylhexanoic acid, zirconium salt	Fresh water	0.36 mg/l	-
,	1	ı	<u> </u>

ECTION 6. Exposure conti	iois/personal protection	J11	
	Marine water	0.036 mg/l	_
	Sewage Treatment	71.7 mg/l	_
	Plant		
	Fresh water sediment	6.37 mg/kg dwt	_
	Marine water sediment	0.637 mg/kg dwt	_
	Soil	1.06 mg/kg dwt	_
2-butanone oxime	Fresh water	0.256 mg/l	_
2-butarione oxime	Sewage Treatment	177 mg/l	
	Plant		
mesitylene	Fresh water	0.101 mg/l	-
	Marine water	0.101 mg/l	-
	Sewage Treatment	2.02 mg/l	-
	Plant		
	Fresh water sediment	7.86 mg/kg dwt	-
	Marine water sediment	7.86 mg/kg dwt	-
	Soil	1.34 mg/kg dwt	_
cobalt bis(2-ethylhexanoate)	Fresh water	0.6 μg/l	-
	Marine water	2.36 µg/l	_
	Sewage Treatment	0.37 mg/l	_
	Plant	3	
	Fresh water sediment	9.5 mg/kg dwt	_
	Marine water sediment	9.5 mg/kg dwt	_
	Soil	10.9 mg/kg dwt	_
toluene	Fresh water	0.68 mg/l	_
toldono	Marine water	0.68 mg/l	_
	Sewage Treatment	13.61 mg/l	
	Plant		
	Fresh water sediment	16.39 mg/kg dwt	-
	Marine water sediment	16.39 mg/kg dwt	-
	Soil	2.89 mg/kg dwt	-
2-(2-butoxyethoxy)ethanol	Fresh water	1.1 mg/l	-
	Marine water	0.11 mg/l	-
	Sewage Treatment	200 mg/l	-
	Plant		
	Fresh water sediment	4.4 mg/kg dwt	-
	Marine water sediment	0.44 mg/kg dwt	-
	Soil	0.32 mg/kg dwt	-
	Secondary Poisoning	56 mg/kg	-
benzene	Fresh water	1.9 mg/l	-
	Marine water	1.9 mg/l	-
	Sewage Treatment	39 mg/l	_
	Plant		
	Fresh water sediment	33 mg/kg dwt	-
	Marine water sediment	33 mg/kg dwt	-
1	Soil	4.8 mg/kg dwt	

8.2 Exposure controls

Appropriate engineering controls

: Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Gloves

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Environmental exposure controls

Melting point/freezing point

: Do not allow to enter drains or watercourses.

SECTION 9: Physical and chemical properties

: Not available.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.

Colour : Not available.

Odour : Not available.

Odour threshold : Not available.

ph : Not available.

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SECTION 9: Physical and chemical properties

Initial boiling point and

boiling range

: Not available.

Flash point : Closed cup: 30°C

Evaporation rate : Not available.

Flammability (solid, gas) : Not available.

Upper/lower flammability or : Not available.

explosive limits

Vapour pressure: Not available.Vapour density: Not available.

Relative density : 1

Solubility(ies) : Insoluble in the following materials: cold water and hot water.

Partition coefficient: n-octanol/ : Not available.

water

Auto-ignition temperature: Not available.Decomposition temperature: Not available.Viscosity: Not available.Explosive properties: Not available.Oxidising properties: Not available.

9.2 Other information

Solubility in water : Not available.

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products.

10.5 Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions:

oxidising agents, strong alkalis, strong acids.

10.6 Hazardous : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

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SECTION 11: Toxicological information

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains 2-butanone oxime, cobalt bis(2-ethylhexanoate). May produce an allergic reaction.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Naphtha (petroleum), hydrodesulfurized heavy	LC50 Inhalation Vapour	Rat	>10 mg/l	4 hours
,	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
xylene	LC50 Inhalation Vapour	Rat	27.6 mg/l	4 hours
•	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
2-methoxy-1-methylethyl acetate	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Oral	Rat - Female	>5000 mg/kg	_
ethylbenzene	LC50 Inhalation Vapour	Rat	>9.6 mg/l	4 hours
	LD50 Dermal	Rabbit	>15000 mg/kg	_
	LD50 Oral	Rat	>3500 mg/kg	_
n-butyl acetate	LC50 Inhalation Vapour	Rat	>21.1 mg/l	4 hours
	LD50 Dermal	Rabbit	>14112 mg/kg	_
	LD50 Oral	Rat	10760 mg/kg	-
1-methoxy-2-propanol	LD50 Dermal	Rabbit	2000 mg/kg	_
	LD50 Oral	Rat	4016 mg/kg	_
Alkylammonium salt (72243/00/2008.0051, Germany)	LD50 Oral	Rat	>5000 mg/kg	-
1,2,4-trimethylbenzene	LD50 Oral	Rat	>5000 mg/kg	_
2-ethylhexanoic acid,	LD50 Dermal	Rabbit	>5 g/kg	
zirconium salt				
	LD50 Oral	Rat	>5 g/kg	
2-butanone oxime	LC50 Inhalation Vapour	Rat	>4.8 mg/l	4 hours
	LD50 Dermal	Rabbit	1000 to 1800	-
	L D 50 0 1	D-4	mg/kg	
	LD50 Oral	Rat	3680 mg/kg	-
cobalt bis(2-ethylhexanoate)	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	1.22 g/kg	-
toluene	LC50 Inhalation Vapour	Rat	28.1 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
2 /2 hta.aa.th.a.a.s) ath = ===!	LD50 Oral	Rat	5580 mg/kg	-
2-(2-butoxyethoxy)ethanol	LD50 Dermal	Rabbit	2700 mg/kg	_
h an-an-a	LD50 Oral	Rat	4500 mg/kg	- 4 hours
benzene	LC50 Inhalation Gas.	Rat	>10000 ppm	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	_
	LD50 Oral	Rat	>3000 mg/kg	-

Conclusion/Summary

: Not available.

Acute toxicity estimates

Route	ATE value
	9900.8 mg/kg 67.78 mg/l

Irritation/Corrosion

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Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Skin - Mild irritant	Rat	-	8 hours 60	-
				microliters	
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				milligrams	
	Skin - Moderate irritant	Rabbit	_	100 Percent	_
	Eyes - Mild irritant	Rabbit	_	87 milligrams	_
	Eyes - Severe irritant	Rabbit	_	24 hours 5	_
	, , , , , , , , , , , , , , , , , , , ,			milligrams	
ethylbenzene	Eyes - Severe irritant	Rabbit	_	500	_
				milligrams	
	Skin - Mild irritant	Rabbit	_	24 hours 15	_
	OKIT - Wild IITICATIC	Tabbit		milligrams	
1 mothavy 2 propagal	Eves Mild irritant	Rabbit		24 hours 500	
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-		_
	Claim Mild inviterat	Dobbit		milligrams	
	Skin - Mild irritant	Rabbit	-	500	-
		5		milligrams	
2-butanone oxime	Eyes - Severe irritant	Rabbit	-	100	-
				microliters	
mesitylene	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
				milligrams	
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
				milligrams	
oluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes	-
	_			100	
				milligrams	
	Eyes - Mild irritant	Rabbit	_	870	_
				Micrograms	
	Eyes - Severe irritant	Rabbit	_	24 hours 2	_
	Lyco Gevere irritarit	Rabbit		milligrams	
	Skin - Mild irritant	Pig	_	24 hours 250	_
	OKIT - Wild IITICATIC	19		microliters	
	Skin - Mild irritant	Rabbit		435	
	Skiii - Willa IIIItalit	Rabbit	-		_
	Olive Madanata invitant	Dahbit		milligrams	
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
	Oldin Manlaunta initaurt	D - 1-1-14		milligrams	
	Skin - Moderate irritant	Rabbit	-	500	-
				milligrams	
2-(2-butoxyethoxy)ethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 20	-
				milligrams	
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
benzene	Eyes - Moderate irritant	Rabbit	-	88 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2	-
	-			milligrams	
	Skin - Mild irritant	Rat	_	8 hours 60	_
				microliters	
	Skin - Mild irritant	Rabbit	_	24 hours 15	_
				milligrams	
	Skin - Moderate irritant	Rabbit	_	24 hours 20	_
	Citi Wodorato IIItarit	i dobit		milligrams	
				Immigratio	

Sensitisation

Conclusion/Summary

Mutagenicity

Conclusion/Summary

Carcinogenicity

Conclusion/Summary

Reproductive toxicity

Conclusion/Summary : Not available.

: Not available.

: Not available.

: Not available.

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SECTION 11: Toxicological information

Teratogenicity

Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Naphtha (petroleum), hydrodesulfurized heavy xylene	Category 3 Category 3	Not applicable. Not applicable.	Narcotic effects Respiratory tract irritation
2-methoxy-1-methylethyl acetate n-butyl acetate 1-methoxy-2-propanol 1,2,4-trimethylbenzene	Category 3 Category 3 Category 3 Category 3	Not applicable. Not applicable. Not applicable. Not applicable.	Narcotic effects Narcotic effects Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Naphtha (petroleum), hydrodesulfurized heavy	Category 1	Inhalation	Not determined
xylene	Category 2	Not determined	Not determined
ethylbenzene	Category 2	Not determined	hearing organs

Aspiration hazard

Product/ingredient name	Result
Naphtha (petroleum), hydrodesulfurized heavy xylene ethylbenzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

Product/ingredient name	Result	Species	Exposure
Naphtha (petroleum), hydrodesulfurized heavy	EC50 >100 mg/l	Daphnia	48 hours
	LC50 >100 mg/l	Fish	96 hours
xylene	Acute EC50 1 to 10 mg/l	Algae	72 hours
•	Acute EC50 1 to 10 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 1 to 10 mg/l	Fish	96 hours
2-methoxy-1-methylethyl	Acute EC50 >1000 mg/l	Algae - Pseudokirchnerella	96 hours
acetate		subcapitata	
	Acute EC50 408 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 134 mg/l	Fish - Oncorhynchus mykiss	96 hours
ethylbenzene	Acute EC50 >1.8 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 >10 mg/l	Fish - Pimephales promelas	96 hours
n-butyl acetate	Acute EC50 397 mg/l	Algae - Selenastrum capricornutum	72 hours
	Acute EC50 44 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 32 mg/l	Crustaceans - Artemia salina	48 hours
	Acute LC50 18 mg/l	Fish - Pimephales promelas	96 hours
	Acute NOEC 200 mg/l	Algae	72 hours
1-methoxy-2-propanol	Acute EC50 >1000 mg/l	Aquatic plants - Selenastrum capricornutum	96 hours

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	Acute EC50 >21000 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 6812 mg/l	Fish - Leuciscus idus	96 hours
Alkylammonium salt	Acute EC50 0.4 mg/l	Algae	72 hours
(72243/00/2008.0051,			Single
Germany)			dose
	Acute EC50 8 mg/l	Fish	96 hours
			Single
			dose
1,2,4-trimethylbenzene	Acute EC50 1 to 10 mg/l	Fish	96 hours
2-butanone oxime	EC50 6.1 to 11.6 mg/l	Algae	72 hours
	LC50 750 mg/l	Daphnia	48 hours
	LC50 >100 mg/l	Fish	96 hours
cobalt bis(2-ethylhexanoate)	Acute EC50 0.61 mg/l	Daphnia - Daphnia magna	48 hours
	Acute IC50 0.144 mg/l	Algae - Pseudokirchneriella	72 hours
		subcapitata	
	Acute LC50 1.5 mg/l	Fish - Onchorhynchus mykiss	96 hours
toluene	Acute EC50 12.5 mg/l	Algae	72 hours
	Acute EC50 3.8 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 5.5 mg/l	Fish - Oncorhynchus kisutch	96 hours
2-(2-butoxyethoxy)ethanol	Acute LC50 1300000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
benzene	EC50 >300 mg/l	Daphnia	48 hours

Conclusion/Summary: Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
2-methoxy-1-methylethyl	OECD 302B	100 % - 28 days	-	-
acetate	Inherent			
	Biodegradability:			
	Zahn-Wellens/ EMPA Test			
	OECD 301F	83 % - 28 days	_	_
	Ready	20 days		
	Biodegradability -			
	Manometric			
	Respirometry			
	Test			
n-butyl acetate	OECD 301D	>80 % - 5 days	-	-
	Ready Biodegradability -			
	Closed Bottle			
	Test			
1-methoxy-2-propanol	OECD 301E	96 % - 28 days	-	-
	301E Ready	•		
	Biodegradability -			
	Modified OECD			
	Screening Test			

Conclusion/Summary: Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
2-methoxy-1-methylethyl acetate	-	-	Readily
n-butyl acetate 1-methoxy-2-propanol toluene	- - -	- - -	Readily Readily Readily

12.3 Bioaccumulative potential

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Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	8.1 to 25.9	low
2-methoxy-1-methylethyl acetate	1.2	-	low
ethylbenzene	3.6	-	low
n-butyl acetate	2.3	-	low
1-methoxy-2-propanol	<1	-	low
1,2,4-trimethylbenzene	3.63	243	low
2-ethylhexanoic acid, zirconium salt	-	2.96	low
2-butanone oxime	0.63	2.5 to 5.8	low
mesitylene	3.42	161	low
cobalt bis(2-ethylhexanoate)	-	15600	high
toluene	2.73	90	low
2-(2-butoxyethoxy)ethanol	1	_	low
benzene	2.13	11	low

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects: No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste

Disposal considerations

: The classification of the product may meet the criteria for a hazardous waste.

Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

Packaging

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Disposal considerations

: Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers.

Empty containers must be scrapped or reconditioned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions.

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SECTION 13: Disposal considerations

Type of packaging		European waste catalogue (EWC)
CEPE Paint Guidelines	15 01 10*	packaging containing residues of or contaminated by hazardous substances

Special precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINTPAINT	PAINT	Paint
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information

ADR/RID

IMDG

IATA

The environmentally hazardous substance mark is not required when transported in sizes of ≤ 5 L or ≤ 5 kg.

Hazard identification number 30

Limited quantity 5 L

Special provisions 163, 640E, 650, 367

Tunnel code (D/E)

ADN The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Special provisions 163, 367, 640E, 650

The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Emergency schedules F-E, _S-E **Special provisions** 163, 223, 367, 955

The environmentally hazardous substance mark may appear if required by other transportation regulations.

> **Quantity limitation** Passenger and Cargo Aircraft: 60 L. Packaging instructions: 355. Cargo Aircraft Only: 220 L. Packaging instructions: 366. Limited Quantities -

Passenger Aircraft: 10 L. Packaging instructions: Y344.

Special provisions A3, A72, A192

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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SECTION 14: Transport information

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

: Not applicable.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions

: Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

VOC

: The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the

product label and/or technical data sheet for further information.

VOC for Ready-for-Use

Mixture

: Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

National regulations

Industrial use

: The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

Product/ingredient name	List name	Name on list	Classification	Notes
cobalt bis(2-ethylhexanoate)	UK Occupational Exposure Limits EH40 - WEL	cobalt compounds	Carc.	-
benzene	UK Occupational Exposure Limits EH40 - WEL	benzene; benzol	Carc.	-

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

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SECTION 15: Regulatory information

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : All components are listed or exempted.

Canada : Not determined.

China : At least one component is not listed. **Europe** : All components are listed or exempted. : Japan inventory (ENCS): Not determined. **Japan** Japan inventory (ISHL): Not determined.

Malaysia : Not determined.

New Zealand : All components are listed or exempted.

Philippines : Not determined. Republic of Korea : Not determined. : Not determined. **Taiwan Thailand** : Not determined. : Not determined. **Turkey United States** : Not determined. **Viet Nam** : Not determined.

15.2 Chemical safety : No Chemical Safety Assessment has been carried out.

assessment

SECTION 16: Other information

CEPE code

Indicates information that has changed from previously issued version.

Abbreviations and

: ATE = Acute Toxicity Estimate

acronyms

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification	
Flam. Liq. 3, H226	On basis of test data	
Skin Irrit. 2, H315	Calculation method	
Eye Irrit. 2, H319	Calculation method	
Skin Sens. 1, H317	Calculation method	
STOT SE 3, H336	Calculation method	
STOT RE 1, H372	Calculation method	
Aquatic Chronic 2, H411	Calculation method	

Full text of abbreviated H statements

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SECTION 16: Other information

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
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.
H340	May cause genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H361d	Suspected of damaging the unborn child.
H361fd (oral)	Suspected of damaging fertility if swallowed. Suspected of
	damaging the unborn child if swallowed.
H361fd	Suspected of damaging fertility. Suspected of damaging the
	unborn child.
H372 (inhalation)	Causes damage to organs through prolonged or repeated
	exposure if inhaled.
H372	Causes damage to organs through prolonged or repeated
	exposure.
H373	May cause damage to organs through prolonged or repeated
	exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
	1

Full text of classifications [CLP/GHS]

Tail toxt of diagonications [GE176116]			
Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4		
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation) - Category 4		
Aquatic Acute 1, H400	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1		
Aquatic Chronic 1, H410	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1		
Aquatic Chronic 2, H411	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2		
Aquatic Chronic 3, H412	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3		
Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1		
Carc. 1A, H350	CARCINOGENICITY - Category 1A		
Carc. 2, H351	CARCINOGENICITY - Category 2		
EUH066	Repeated exposure may cause skin dryness or cracking.		
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1		
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2		
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2		
Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3		
Muta. 1B, H340	GERM CELL MUTAGENICITY - Category 1B		
Repr. 2, H361d	REPRODUCTIVE TOXICITY (Unborn child) - Category 2		
Repr. 2, H361fd (oral)	REPRODUCTIVE TOXICITY (Fertility and Unborn child) (oral) -		
	Category 2		
Repr. 2, H361fd	REPRODUCTIVE TOXICITY (Fertility and Unborn child) -		
	Category 2		
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2		
Skin Sens. 1, H317	SKIN SENSITISATION - Category 1		
Skin Sens. 1A, H317	SKIN SENSITISATION - Category 1A		
STOT RE 1, H372 (inhalation)	SPECIFIC TARGET ORGAN TOXICITY - REPEATED		
	EXPOSURE (inhalation) - Category 1		
STOT RE 1, H372	SPECIFIC TARGET ORGAN TOXICITY - REPEATED		
	EXPOSURE - Category 1		
STOT RE 2, H373	SPECIFIC TARGET ORGAN TOXICITY - REPEATED		
	EXPOSURE - Category 2		
STOT SE 3, H335	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE		
	(Respiratory tract irritation) - Category 3		

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SECTION 16: Other information

STOT SE 3, H336 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3

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Notice to reader

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.

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