Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

SAFETY DATA SHEET



HELO 15

SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier Product name : HELO 15

1.2 Relevant identified uses of the substance or mixture and uses advised againstProduct use: Paint.

1.3 Details of the supplier of the safety data sheet

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091. e-mail address of person : Prod-safe@teknos.com responsible for this SDS

National contact

Teknos (UK) Limited, 7 Longlands Rd, Bicester, Oxfordshire OX26 5AH, United Kingdom. Tel. +44 (0) 1869 208005.

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : NHS: 111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Flam. Liq. 3, H226 Skin Sens. 1, H317 STOT SE 3, H336

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 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.

2.2 Label elements

Hazard pictograms



Signal word	Warning	
Hazard statements	H226 - Flammable liquid and vapour. H317 - May cause an allergic skin reaction. H336 - May cause drowsiness or dizziness.	
Precautionary statements		
General	P102 - Keep out of reach of children.	
Prevention	P280 - Wear protective gloves. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	
Response	P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.	
Storage	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.	

SECTION 2: Hazards identification

Disposal	:	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	:	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
2.3 Other hazards		
Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	:	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	:	None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : N	<i>A</i> ixture		1	
Product/ingredient name	Identifiers	%	Classification	Туре
Naphtha (petroleum), hydrotreated heavy	REACH #: 01-2119463258-33 EC: 265-150-3 CAS: 64742-48-9 Index: 649-327-00-6	≥25 - <50	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066	[1]
Butan-1-ol	REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	<1	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	[1] [2]
Ethanol	REACH #: 01-2119457610-43 EC: 200-578-6 CAS: 64-17-5 Index: 603-002-00-5	≤0.3	Flam. Liq. 2, H225 Eye Irrit. 2, H319	[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. 1B, H360F Aquatic Acute 1, H400 (M=1) Aquatic Chronic 3, H412	[1] [2]
2-ethylhexanoic acid, zirconium salt	REACH #: 01-2119979088-21 EC: 245-018-1 CAS: 22464-99-9	≤0.3	Repr. 2, H361d	[1] [2]
1-Methoxy 2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≤0.3	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
Dipropyleneglycolmethylether	REACH #: 01-2119450011-60 EC: 252-104-2 CAS: 34590-94-8	≤0.1	Not classified.	[2]
Propan-2-ol	REACH #: 01-2119457558-25 EC: 200-661-7	≤0.1	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1] [2]
Date of issue/Date of revision	: 05/10/2023 Date of previous issue	e : 16/01/2023	Version : 3	2/18
HELO 15			Label No :507	90

SECTION 3: Cor	nposition/information on i	ngredients		
Butanone	CAS: 67-63-0 Index: 603-117-00-0 REACH #: 01-2119457290-43 EC: 201-159-0 CAS: 78-93-3 Index: 606-002-00-3	≤0.1	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[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. Contains: > 1 % TiO2

Туре

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

SECTION 4: First aid measures

Eye contact	: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
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

Over-exposure signs/symptoms

Eye contact

: No specific data.

Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.
4.3 Indication of any imn	nediate medical attention and special treatment needed
Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Suitable extinguishing media media	Use dry chemical, CO ₂ , water spray (fog) or foam.	
Unsuitable extinguishing media	Do not use water jet.	
5.2 Special hazards arising f	n the substance or mixture	
Hazards from the substance or mixture	Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.	
Hazardous combustion products	Decomposition products may include the following materials: metal oxide/oxides	
5.3 Advice for firefighters		
Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.	
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.	

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	•	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
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	:	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Date of issue/Date of revision	: 05/10/2023	Date of previous issue	: 16/01/2023	Version	:3	4/18
HELO 15				Label No	5 0790)

SECTION 6: Accidental release measures

Small spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spill product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
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

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Seveso Directive - Reporting thresholds

Danger criteriaCategoryNotification and MAPP
thresholdSafety report thresholdP5c5000 tonne50000 tonne

7.3 Specific end use(s) Recommendations

: Not available.

Industrial sector specific : Not available. solutions

SECTION 8: Exposure controls/personal protection

8.1 Control parameters	
Occupational exposure limits	
Butan-1-ol	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 154 mg/m ³ 15 minutes.
Ethanol	STEL: 50 ppm 15 minutes. EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 1000 ppm 8 hours. TWA: 1920 mg/m ³ 8 hours.
Cobalt bis(2-ethylhexanoate)	EH40/2005 WELs (United Kingdom (UK), 1/2020). [cobalt and cobalt compounds as Co] Inhalation sensitiser. TWA: 0.1 mg/m ³ , (as Co) 8 hours.
2-ethylhexanoic acid, zirconium salt	EH40/2005 WELs (United Kingdom (UK), 1/2020). [zirconium compounds as Zr] STEL: 10 mg/m ³ , (as Zr) 15 minutes. TWA: 5 mg/m ³ , (as Zr) 8 hours.
1-Methoxy 2-propanol	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 560 mg/m ³ 15 minutes. STEL: 150 ppm 15 minutes. TWA: 375 mg/m ³ 8 hours. TWA: 100 ppm 8 hours.
Dipropyleneglycolmethylether	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. TWA: 308 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
Propan-2-ol	EH40/2005 WELs (United Kingdom (UK), 1/2020). STEL: 1250 mg/m ³ 15 minutes. STEL: 500 ppm 15 minutes. TWA: 999 mg/m ³ 8 hours. TWA: 400 ppm 8 hours.
Butanone	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 899 mg/m ³ 15 minutes. STEL: 300 ppm 15 minutes. TWA: 600 mg/m ³ 8 hours. TWA: 200 ppm 8 hours.

Biological exposure indices

Product/ingredient name	Exposure indices
Butanone	EH40/2005 BMGVs (United Kingdom (UK), 8/2018) BGV: 70 μmol/l, butan-2-one [in urine]. Sampling time: post shift.
	should be made to appropriate monitoring standards. Reference to idance documents for methods for the determination of hazardous

substances will also be required.

DNELs/DMELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
Naphtha (petroleum), hydrotreated heavy	DNEL	Long term Inhalation	0.41 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	1.9 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	178.57 mg/ m³	General population	Local
	DNEL	Long term Oral	300 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	300 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	300 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	640 mg/m ³	General population	Local
te of issue/Date of revision : 05/1	0/2023	Date of previous issue	: 16/01/2	023	Version : 3 6/18
ELO 15				Lat	el No : <mark>5</mark> 0790

	DNEL	Long term	837.5 mg/	Workers	Local	
		Inhalation	m ³			
	DNEL	Short term	1066.67	Workers	Local	
		Inhalation	mg/m ³	Wontore	Loodi	
	DNEL	Short term	1152 mg/	General	Systemic	
		Inhalation	m ³	population	Oysternie	
	DNEL	Short term	1286.4 mg/	Workers	Systemic	
	DINLL	Inhalation	m ³	VIOREIS	Systemic	
Butan-1-ol	DNEL	Long term Oral	1.5625 mg/	General	Systemic	
Bulan-1-0	DNEL	Long term Oral	kg bw/day	population	Systemic	
	DNEL	Long term Dermal	3.125 mg/	General	Systemic	
	DINEL	Long term Derma			Systemic	
			kg bw/day	population	Curatamia	
	DNEL	Long term	55.357 mg/	General	Systemic	
		Inhalation	m ³	population	1 1	
	DNEL	Long term	155 mg/m³	General	Local	
		Inhalation		population		
	DNEL	Long term	310 mg/m ³	Workers	Local	
		Inhalation				
Ethanol	DNEL	Long term Oral	87 mg/kg	General	Systemic	
			bw/day	population		
	DNEL	Long term	114 mg/m ³	General	Systemic	
		Inhalation		population		
	DNEL	Long term Dermal	206 mg/kg	General	Systemic	
		5	bw/day	population	,	
	DNEL	Long term Dermal	343 mg/kg	Workers	Systemic	
			bw/day		-,	
	DNEL	Short term	950 mg/m ³	General	Local	
	DIVEL	Inhalation	ooo mg/m	population	Loodi	
	DNEL	Long term	950 mg/m ³	Workers	Systemic	
	DINLL	Inhalation	950 mg/m	VIOREIS	Systemic	
			1000 mg/	Warkara		
	DNEL	Short term	1900 mg/	Workers	Local	
	DNIEL	Inhalation	m ³		1 1	
Cobalt bis(2-ethylhexanoate)	DNEL	Long term	37 µg/m³	General	Local	
		Inhalation	"	population		
	DNEL	Long term Oral	175 µg/kg	General	Systemic	
			bw/day	population		
	DNEL	Long term	235.1 µg/	Workers	Local	
		Inhalation	m³			
2-ethylhexanoic acid, zirconium salt	DNEL	Long term	2.5 mg/m ³	General	Systemic	
		Inhalation		population		
	DNEL	Long term Oral	2.5 mg/kg	General	Systemic	
			bw/day	population		
	DNEL	Long term Dermal	3.25 mg/	General	Systemic	
		U U	kg bw/day	population	,	
	DNEL	Long term	5 mg/m ³	Workers	Systemic	
		Inhalation	5		-,	
	DNEL	Long term Dermal	6.49 mg/	Workers	Systemic	
			kg bw/day			
1-Methoxy 2-propanol	DNEL	Long term Oral	33 mg/kg	General	Systemic	
			bw/day	population	Gysternic	
	DNEL	Long term	43.9 mg/m ³	General	Systemic	
			+5.9 mg/m		Systemic	
		Inhalation	70 maller	population	Curata and a	
	DNEL	Long term Dermal	78 mg/kg	General	Systemic	
	DUE		bw/day	population		
	DNEL	Long term Dermal	183 mg/kg	Workers	Systemic	
		l	bw/day			
	DNEL	Long term	369 mg/m ³	Workers	Systemic	
		Inhalation				
	DNEL	Short term	553.5 mg/	Workers	Local	
		Inhalation	m³			
	DNEL	Short term	553.5 mg/	Workers	Systemic	
		Inhalation	m ³		- ,	
Dipropyleneglycolmethylether	DNEL	Long term Oral	36 mg/kg	General	Systemic	
			bw/day	population		
	DNEL	Long term	37.2 mg/m ³	General	Systemic	
		Inhalation	57.2 mg/m	population	Systemic	
	1	minalation	1	population		

	DNEL	Long term Dermal	121 mg/kg	General	Systemic
			bw/day	population	- ,
	DNEL	Long term Dermal	283 mg/kg bw/day		Systemic
	DNEL	Long term Inhalation	308 mg/m ³	Workers	Systemic
Propan-2-ol	DNEL	Long term Oral	26 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	89 mg/m³	General population	Systemic
	DNEL	Long term Dermal	319 mg/kg bw/day		Systemic
	DNEL	Long term Inhalation	500 mg/m ³		Systemic
	DNEL	Long term Dermal	888 mg/kg bw/day	Workers	Systemic
Butanone	DNEL	Long term Oral	31 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	106 mg/m ³		Systemic
	DNEL	Long term Dermal	412 mg/kg bw/day		Systemic
	DNEL	Long term Inhalation	600 mg/m ³		Systemic
	DNEL	Long term Dermal	1161 mg/ kg bw/day	Workers	Systemic

PNECs

No PNECs available

8.2 Exposure controls	
Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Individual protection meas	<u>ures</u>
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.
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: safety glasses with side-shields.
Skin protection	
Hand protection	: 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.
	Recommendations : Wear suitable gloves tested to EN374.
	< 1 hour (breakthrough time): Nitrile gloves. thickness > 0.3 mm
	1 - 4 hours (breakthrough time): polyvinyl alcohol (PVA) thickness > 0.3 mm or $4H$ / Silver Shield® gloves.
	> 8 hours (breakthrough time): Viton® thickness > 0.3 mm gloves
Date of issue/Date of revision	: 05/10/2023 Date of previous issue : 16/01/2023 Version : 3 8/18
HELO 15	Label No : <mark>5</mark> 0790

SECTION 8: Exposure controls/personal protection

	Wash hands before breaks and immediately after handling the product.
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.
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.
	Filter type: A
	Filter type (spray application): A P
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Colour	: Various
Odour	: Slight
Odour threshold	: Not available.
Melting point/freezing point	: Not available.
Initial boiling point and	:
boiling range	
Ingredient name	ാ °

Ingredient name	°C	°F	Method
Maphtha (petroleum), hydrotreated heavy	155 to 217	311 to 422.6	

Flammability (solid, gas)	: Not available.
Upper/lower flammability or explosive limits	: Kower: 1.4% Upper: 7.6%
Flash point	: Ølosed cup: 41°C (105.8°F)
Auto-ignition temperature	1 · · · · · · · · · · · · · · · · · · ·

Auto-ignition temperature

Ingredient name	°C	°F	Method
Aphtha (petroleum), hydrotreated heavy	280 to 470	536 to 878	

Decomposition temperature	: Not available.
рН	: Not applicable.
Viscosity	: K inematic (40°C): >20.5 mm²/s
Solubility(ies)	:
Not available.	
Solubility in water	: Not available.
Partition coefficient: n-octanol/	: Not applicable.
water	
Vapour pressure	:

	Vapour Pressure at 20°C			Vapour pressure at 50°C		
Ingredient name	mm Hg kPa		Method	mm Hg	kPa	Method
Maphtha (petroleum), hydrotreated heavy	0.75006 to 2.25018	0.1 to 0.3				
Relative density	: Not	available.	•		•	
)ensity	: 0.9	g/cm³				
apour density	: Not	available.				
Explosive properties	: Not	available.				
Dxidising properties	: Not available.					
Particle characteristics						
Median particle size	: Not	applicable.				

SECTION 10: Stability and reactivity				
10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredien	ts.		
10.2 Chemical stability	: The product is stable.			
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.			
10.4 Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, we braze, solder, drill, grind or expose containers to heat or sources of ignition.	əld,		
10.5 Incompatible materials	: Reactive or incompatible with the following materials: oxidising materials			
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.			

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Naphtha (petroleum),	LC50 Inhalation Vapour	Rat	8500 mg/m ³	4 hours
hydrotreated heavy	•		C C	
	LD50 Oral	Rat	>6 g/kg	-
Butan-1-ol	LC50 Inhalation Vapour	Rat	24000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	3400 mg/kg	-
	LD50 Oral	Rat	790 mg/kg	-
Ethanol	LC50 Inhalation Vapour	Rat	124700 mg/m ³	4 hours
	LD50 Oral	Rat	7 g/kg	-
Cobalt bis(2-ethylhexanoate)	LD50 Dermal	Rabbit	>5 g/kg	-
· · · · · · · · · · · · · · · · · · ·	LD50 Oral	Rat	1.22 g/kg	-
2-ethylhexanoic acid,	LD50 Dermal	Rabbit	>5 g/kg	-
zirconium salt				
	LD50 Oral	Rat	>5 g/kg	-
1-Methoxy 2-propanol	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	6600 mg/kg	-
Propan-2-ol	LD50 Dermal	Rabbit	12800 mg/kg	-
-	LD50 Oral	Rat	5000 mg/kg	-
Butanone	LD50 Dermal	Rabbit	6480 mg/kg	-
	LD50 Oral	Rat	2737 mg/kg	-

Acute toxicity estimates

SECTION 11: Toxicological information

Route

ATE value

Not available.

Product/ingredient name	Result	Species	Score	Exposure	Observation
Butan-1-ol	Eyes - Severe irritant	Rabbit	-	0.005 MI	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2	-
				mg	
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
				mg	
Ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
	Eyes - Moderate irritant	Rabbit	-	0.066666667	-
				minutes 100	
				mg	
	Eyes - Moderate irritant	Rabbit	-	100 uL	-
	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	400 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
				mg	
1-Methoxy 2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
		Dahkit		mg	
	Skin - Mild irritant	Rabbit	-	500 mg	-
Dipropyleneglycolmethylether	Eyes - Mild irritant	Human	-	8 mg	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
	Skin - Mild irritant	Rabbit		mg	
Propan-2-ol	Eyes - Moderate irritant	Rabbit	-	500 mg 10 mg	-
FTOpall-2-01	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
		Tabbit	-	mg	-
	Eyes - Severe irritant	Rabbit	_	100 mg	_
	Skin - Mild irritant	Rabbit	_	500 mg	_
Butanone	Skin - Mild irritant	Rabbit	-	24 hours 14	-
				mg	
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
Conclusion/Summany	Parad an available data th		ritorio oro	Ũ	
	: Based on available data, th		mena are	not met.	
<u>Sensitisation</u>					
Conclusion/Summary	May cause an allergic skin	reaction			

Conclusion/Summary : Based on available data, the classification criteria are not met.

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Naphtha (petroleum), hydrotreated heavy	Category 3	-	Narcotic effects
Butan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
1-Methoxy 2-propanol	Category 3	-	Narcotic effects
Propan-2-ol	Category 3	-	Narcotic effects
Butanone	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Carcinogenicity

Teratogenicity

Reproductive toxicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

SECTION 11: Toxicological information

Not available.

Aspiration hazard

Product/ingredient name Naphtha (petroleum), hydrotreated heavy		Result	
		ASPIRATION HAZARD - Category 1	
Information on likely ro of exposure	outes : Not available.		
Potential acute health e	effects		
Eye contact	: No known significant effects	s or critical hazards.	
Inhalation	: Can cause central nervous dizziness.	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.	
Skin contact	: May cause an allergic skin i	: May cause an allergic skin reaction.	
Ingestion	: Can cause central nervous	system (CNS) depression.	

	i no opeenie data.
Inhalation	: Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
<u>Long term exposure</u>		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Potential chronic health eff		
Not available.		
Conclusion/Summary	Not available.	
General	Once sensitized, a severe allergic reaction may occur when subsequently e to very low levels.	xposed
Carcinogenicity	No known significant effects or critical hazards.	
Mutagenicity	No known significant effects or critical hazards.	
Reproductive toxicity	No known significant effects or critical hazards.	
Other information	Not available.	

SECTION 12: Ecological information

Product/ingredient name	Result	Species	Exposure
Butan-1-ol	Acute EC50 1983000 µg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i> <i>magna</i>	48 hours
	Acute LC50 1730000 µg/l Fresh water	Fish - Fathead minnow - <i>Pimephales promelas</i>	96 hours
Ethanol	Acute EC50 17.921 mg/l Marine water	Algae - Green algae - <i>Ulva</i> pertusa	96 hours
	Acute EC50 2000 μg/l Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Acute LC50 25500 μg/l Marine water	Crustaceans - San Francisco Brine Shrimp - <i>Artemia</i> <i>franciscana</i> - Larvae	48 hours
	Acute LC50 42000 µg/l Fresh water	Fish - Rainbow trout,donaldson trout - <i>Oncorhynchus mykiss</i>	4 days
	Chronic NOEC 4.995 mg/l Marine water	Algae - Green algae - Ulva pertusa	96 hours
	Chronic NOEC 100 ul/L Fresh water	Daphnia - Water flea - <i>Daphnia</i> <i>magna</i> - Neonate	21 days
	Chronic NOEC 0.375 ul/L Fresh water	Fish - Eastern mosquitofish - <i>Gambusia holbrooki</i> - Larvae	12 weeks
Propan-2-ol	Acute EC50 10100 mg/l Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Acute LC50 1400000 µg/l Marine water	Crustaceans - Common shrimp, sand shrimp - Crangon crangon	48 hours
	Acute LC50 4200000 μg/l Fresh water	Fish - Harlequinfish, red rasbora - <i>Rasbora</i> <i>heteromorpha</i>	96 hours
Butanone	Acute EC50 >500000 µg/l Marine water	Algae - Diatom - <i>Skeletonema</i> costatum	96 hours
	Acute EC50 5091000 µg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i> <i>magna</i> - Larvae	48 hours
	Acute LC50 3220000 µg/l Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours

Conclusion/Summary : Based on available data, the classification criteria are not met.

12.2 Persistence and degradability

Conclusion/Summary : This product has not been tested for biodegradation.

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential	
Naphtha (petroleum),	-	10 to 2500	High	
hydrotreated heavy			_	
Butan-1-ol	1	-	Low	
Ethanol	-0.35	-	Low	
Cobalt bis(2-ethylhexanoate)	-	15600	High	
2-ethylhexanoic acid,	-	2.96	Low	
zirconium salt				
1-Methoxy 2-propanol	<1	-	Low	
Dipropyleneglycolmethylether	0.004	-	Low	
Propan-2-ol	0.05	-	Low	
Butanone	0.3	-	Low	

12.4 Mobility in soil

Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

: 05/10/2023 Date of previous issue

:16/01/2023

SECTION 12: Ecological information

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects

: No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment metho	ds	
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	1	The classification of the product may meet the criteria for a hazardous waste.
European waste catalogue (EWC)	:	080111*, 200127*
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.
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	ΙΑΤΑ
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	111	111	111	111
14.5 Environmental hazards	No.	No.	No.	No.

Additional information

IMDG

ADR/RID	 <u>Viscous liquid exception</u> This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.2.3.1.5.1. <u>Tunnel code</u> (D/E)
ADN	: <u>Viscous liquid exception</u> This class 3 viscous liquid is not subject to regulation in

packagings up to 450 L according to 2.2.3.1.5.1.

: Viscous liquid exception This class 3 viscous liquid is not subject to regulation in packagings up to 450 L according to 2.3.2.5.

SECTION 14: Transport information

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 user the event of an accident or spillage.

14.7 Transport in bulk according to IMO

: Not relevant/applicable due to nature of the product.

instruments

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture **UK (GB)/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.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants Not listed.

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

No listed substance

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category		
P5c		

National regulations

Product/ingredient name	List name	Name on list	Classification	Notes
Cobalt bis(2-ethylhexanoate)	UK Occupational Exposure Limits EH40 - WEL	cobalt and cobalt compounds as Co	Carc.	-

EU regulations

Industrial emissions (integrated pollution prevention and control) - Air	: Not listed
Industrial emissions (integrated pollution prevention and control) - Water	: Not listed
International regulations	
Chemical Weapon Convention	n List Schedules I, II & III Chemicals
Not listed.	
Montreal Protocol Not listed.	

SECTION 15: Regulatory information

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety	1	This product contains substances for which Chemical Safety Assessments are still
assessment		required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and
	Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019
	No. 720 and amendments
	DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level
	EUH statement = GB CLP-specific Hazard statement
	N/A = Not available
	PBT = Persistent, Bioaccumulative and Toxic
	PNEC = Predicted No Effect Concentration
	RRN = REACH Registration Number
	SGG = Segregation Group
	vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
Skin Sens. 1, H317	On basis of test data Calculation method Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H360F	May damage fertility.
H361d	Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications

Acute Tox. 4	ACUTE TOXICITY - Category 4	
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1	
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3	
Asp. Tox. 1	ASPIRATION HAZARD - Category 1	
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2	
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2	
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3	
Repr. 1B	REPRODUCTIVE TOXICITY - Category 1B	
Repr. 2	REPRODUCTIVE TOXICITY - Category 2	
-		

SECTION 16: Other information		
Skin Irrit. 2 Skin Sens. 1 Skin Sens. 1A STOT SE 3	SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITISATION - Category 1 SKIN SENSITISATION - Category 1A SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3	
Date of issue/ Date of revision	: 05/10/2023	
Date of previous issue	e : 16/01/2023	
Version	: 3	

Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.