

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 15-10-2018 Revision date: 14-8-2024 Supersedes version of: 10-7-2023 Version: 3.0

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

1.1. Product identifier

Product form	: Mixture
Trade name	: Perlus FG 32
Product code	: 08.10.24
Type of product	: Lubricants
Product group	: Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category Use of the substance/mixture Industrial use,Professional useHydraulic oil

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Kroon-Oil B.V. Dollegoorweg 15 NL 7602 EC Almelo Netherlands T 0031 (0)546 81 81 65 vib@kroon-oil.nl

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Cardiff Centre) University Hospital Llandough	Penlan Road CF64 2XX	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazardous to the aquatic environment – Chronic Hazard, H411

Category 2 Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice. Toxic to aquatic life with long lasting effects.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

2.2. Label elements	
Labelling according to Regulation (EC)	No. 1272/2008 [CLP]
Hazard pictograms (CLP)	: GHS09
Signal word (CLP)	:-
Hazard statements (CLP)	: H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P273 - Avoid release to the environment.
	P391 - Collect spillage.
	P501 - Dispose of contents/container to hazardous or special waste collection point, in
	accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments

: The highly refined mineral oil contains <3% (w/w) DMSOextract, according to IP346.

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	CAS-No.: 68411-46-1 EC-No.: 270-128-1 REACH-no: 01-2119491299- 23	< 1	Repr. 2, H361f Aquatic Chronic 3, H412
O,O,O-triphenyl phosphorothioate	CAS-No.: 597-82-0 EC-No.: 209-909-9 REACH-no: 01-2119979545- 21	< 1	Aquatic Chronic 1, H410 (M=10)

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures	
First-aid measures general	: If you feel unwell, seek medical advice.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

4.2. Most important symptoms and effects, both acute and delayed				
Symptoms/effects after inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.			
Symptoms/effects after skin contact	: None under normal conditions.			
Symptoms/effects after eye contact	: None under normal conditions.			
Symptoms/effects after ingestion	: None under normal conditions.			

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media Unsuitable extinguishing media	Water spray. Dry powder. Foam. Carbon dioxide.Do not use a heavy water stream.
5.2. Special hazards arising from the subs	tance or mixture
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	 No fire hazard. No direct explosion hazard. Toxic fumes may be released.
5.3. Advice for firefighters	
Firefighting instructions Protection during firefighting	 Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures				
6.1. Personal precautions, protect	ive equipment and emergency procedures			
General measures	: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.			
6.1.1. For non-emergency personnel				
Protective equipment	: Wear recommended personal protective equipment.			
Emergency procedures	: Ventilate spillage area.			
6.1.2. For emergency responders				
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".			
Emergency procedures	: Evacuate unnecessary personnel. Stop leak if safe to do so.			
6.2. Environmental precautions				

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up				
For containment	: Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.			
Methods for cleaning up	: Take up liquid spill into absorbent material.			
Other information	: Dispose of materials or solid residues at an authorized site.			
C. 4. Deference to other continue				
6.4. Reference to other sections				

For further information refer to section 13.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 7: Handling and storage			
7.1. Precautions for safe handling			
Additional hazards when processed Precautions for safe handling Hygiene measures	 Not expected to present a significant hazard under anticipated conditions of normal use. Ensure good ventilation of the work station. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. 		
7.2. Conditions for safe storage, including any incompatibilities			
Technical measures Storage conditions Incompatible products Storage temperature Packaging materials	 Keep in a cool, well-ventilated place away from heat. Keep cool. Protect from sunlight. Oxidizing agent. Reducing agents. < 40 °C Store always product in container of same material as original container. 		
7.3. Specific end use(s)			

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Perlus FG 32			
EU - Indicative Occupational Exposure Limit (IOEL)			
Exposure limits/standards for materials that can be formed when handling this product. When mists/aerosols can occur the following is recommended	5 mg/m³ - ACGIH TLV (inhalable fraction).		

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Personal protective equipment symbol(s):



Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

Eye protection						
Type Field of application Characteristics Standard						
Safety glasses	Droplet	clear	EN 166			

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	≥0.35		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Respiratory protection			
Device	Filter type	Condition	Standard
Full face mask, Half-mask		Mist formation	EN 136, EN 140

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
,	•
Colour	: Yellow.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Non flammable.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 232 °C - ASTM D92 (COC)
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
рН	: Not available
Viscosity, kinematic	: 30,8 mm²/s (40 °C) - ASTM D7042
Solubility	: Water: Insoluble / Slightly miscible
Partition coefficient n-octanol/water (Log Kow)	: Not available

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

The product is non-reactive under normal conditions of use, storage and transport.

None under recommended storage and handling conditions (see section 7).

No dangerous reactions known under normal conditions of use. Reacts violently with (strong) oxidizers.

Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 0,866 g/cm ³ ASTM D 1298
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

10.1. Reactivity

10.2. Chemical stability Stable under normal conditions.

10.4. Conditions to avoid

10.5. Incompatible materials

SECTION 10: Stability and reactivity

10.3. Possibility of hazardous reactions

Oxidizing agent. Reducing agents.	
10.6. Hazardous decomposition products	
Under normal conditions of storage and use, hazardo	us decomposition products should not be produced.
SECTION 11: Toxicological information	
11.1. Information on hazard classes as defin	ed in Regulation (EC) No 1272/2008
louid toxiolity (oral)	: Not classified
Acute toxicity (dermal) Acute toxicity (inhalation)	: Not classified : Not classified
Benzenamine, N-phenyl-, reaction products	with 2,4,4-trimethylpentene (68411-46-1)
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:
O,O,O-triphenyl phosphorothioate (597-82-0)
LD50 oral rat	> 10000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	: Not classified

Safety Data Sheet

Respiratory or skin sensitisation	: Not classified		
Germ cell mutagenicity	: Not classified		
Carcinogenicity	: Not classified		
Reproductive toxicity	: Not classified		
O,O,O-triphenyl phosphorothioate (597-8	32-0)		
NOAEL (animal/male, F0/P)	300 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test), Guideline: other:		
NOAEL (animal/female, F0/P)	1000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test), Guideline: other:		
NOAEL (animal/male, F1)	300 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test), Guideline: other:		
NOAEL (animal/female, F1)	1000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 421 (Reproduction / Developmental Toxicity Screening Test), Guideline: other:		
STOT-single exposure	: Not classified		
STOT-repeated exposure	: Not classified		
Aspiration hazard	: Not classified		
Perlus FG 32			
Viscosity, kinematic	30,8 mm²/s (40 °C) - ASTM D7042		
Benzenamine, N-phenyl-, reaction produ	cts with 2,4,4-trimethylpentene (68411-46-1)		
Viscosity, kinematic	352,7 mm²/s Temp.: '40°C' Parameter: 'kinematic viscosity (in mm²/s)'		
11.2. Information on other hazards			
11.2.1. Endocrine disrupting properties			
Adverse health effects caused by endocrine disrupting properties	: The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %		
11.2.2. Other information			
Other information	: Inhalation of mists or vapours at elevated temperatures may cause respiratory irritation		

SECTION 12: Ecological information	
12.1. Toxicity	
(acute)	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Toxic to aquatic life with long lasting effects. Not classified
Hazardous to the aquatic environment, long-term : (chronic)	Toxic to aquatic life with long lasting effects.
Benzenamine, N-phenyl-, reaction products v	vith 2,4,4-trimethylpentene (68411-46-1)
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	51 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
O,O,O-triphenyl phosphorothioate (597-82-0)	
LC50 - Fish [1]	> 100 mg/l
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

O,O,O-triphenyl phosphorothioate (597-82-0)				
ErC50 algae	> 100 mg/l			
12.2. Persistence and degradability				
Perlus FG 32				
Persistence and degradability	Rapidly degradable			
Benzenamine, N-phenyl-, reaction products w	ith 2,4,4-trimethylpentene (68411-46-1)			
Persistence and degradability	Not rapidly degradable			
O,O,O-triphenyl phosphorothioate (597-82-0)				
Persistence and degradability	Rapidly degradable			
12.3. Bioaccumulative potential				
Perlus FG 32				
Bioaccumulative potential	Low bioaccumulation potential.			
12.4. Mobility in soil				
No additional information available				
12.5. Results of PBT and vPvB assessment				
No additional information available				
12.6. Endocrine disrupting properties				
endocrine disrupting properties	The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.			

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal consideration	S
13.1. Waste treatment methods	
Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Do not discharge into drains or the environment. Disposal must be done according to officia regulations.
Additional information	: Do not re-use empty containers.
European List of Waste (LoW, EC 2000/532)	: 13 01 10* - mineral based non-chlorinated hydraulic oils
HP Code	: HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	ΙΑΤΑ	ADN	RID	
14.1. UN number or ID number					
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082	
14.2. UN proper shipping	g name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (O,O,O-triphenyl phosphorothioate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (O,O,O-triphenyl phosphorothioate)	Environmentally hazardous substance, liquid, n.o.s. (O,O,O-triphenyl phosphorothioate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (0,0,0-triphenyl phosphorothioate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (O,O,O-triphenyl phosphorothioate)	
Transport document descri	ption				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (O,O,O-triphenyl phosphorothioate), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (O,O,O-triphenyl phosphorothioate), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (O,O,O- triphenyl phosphorothioate), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (O,O,O-triphenyl phosphorothioate), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (O,O,O-triphenyl phosphorothioate), 9, III	
14.3. Transport hazard c	lass(es)				
9	9	9	9	9	
14.4. Packing group					
III	III	III	III	Ш	
14.5. Environmental hazards					
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	
No supplementary informatior	n available	1			

14.6. Special precautions for user

Overland transport		
Classification code (ADR)	:	M6
Special provisions (ADR)	:	274, 335, 375, 601
Limited quantities (ADR)	:	51
Excepted quantities (ADR)	:	E1
Packing instructions (ADR)	:	P001, IBC03, LP01, R001
Special packing provisions (ADR)	:	PP1
Mixed packing provisions (ADR)	:	MP19
Portable tank and bulk container instructions (ADR)	:	T4
Portable tank and bulk container special provisions	:	TP1, TP29
(ADR)		
Tank code (ADR)	:	LGBV
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	3
Special provisions for carriage - Packages (ADR)	:	V12
Special provisions for carriage - Loading, unloading	:	CV13
and handling (ADR)		
Hazard identification number (Kemler No.)	:	90

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Orange plates

Orange plates :	90 3082
Tunnel restriction code (ADR) :	-
EAC code :	•3Z
Limited quantities (IMDG):Excepted quantities (IMDG):Packing instructions (IMDG):Special packing provisions (IMDG):IBC packing instructions (IMDG):Tank instructions (IMDG):Tank special provisions (IMDG):EmS-No. (Fire):EmS-No. (Spillage):	274, 335, 969 5 L E1 LP01, P001 PP1 IBC03 T4 TP1, TP29 F-A S-F A
PCA Limited quantities (IATA):PCA limited quantity max net quantity (IATA):PCA packing instructions (IATA):PCA max net quantity (IATA):CAO packing instructions (IATA):CAO max net quantity (IATA):Special provisions (IATA):	E1 Y964 30kgG 964 450L 964 450L A97, A158, A197, A215 9L
Special provisions (ADN):Limited quantities (ADN):Excepted quantities (ADN):Carriage permitted (ADN):Equipment required (ADN):	M6 274, 335, 375, 601 5 L E1 T PP 0
Excepted quantities (RID):Packing instructions (RID):Special packing provisions (RID):Mixed packing provisions (RID):Portable tank and bulk container instructions (RID):Portable tank and bulk container special provisions:(RID):Tank codes for RID tanks (RID):Transport category (RID):Special provisions for carriage – Packages (RID):Special provisions for carriage - Loading, unloading:	M6 274, 335, 375, 601 5L E1 P001, IBC03, LP01, R001 PP1 MP19 T4 TP1, TP29 LGBV 3 W12 CW13, CW31
	CE8 90

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(b)	Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	Perlus FG 32 ; Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

Seveso Directive (Disaster Risk Reduction)

Seveso III Part I (Categories of dangerous substances)	Qualifying quantity (tonnes)	
	Lower-tier	Upper-tier
E2 Hazardous to the Aquatic Environment in Category Chronic 2	200	500

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 16: Other information

Section	Changed item	Change	Comments
ection	Excepted quantities (ADN)	Added	Comments
	Carriage permitted (ADN)	Added	
	Equipment required (ADN)	Added	
	Number of blue cones/lights (ADN)	Added	
	Revision date	Modified	
	Supersedes	Modified	
	Limited quantities (ADN)	Added	
	Danger labels (ADN)	Added	
	Classification code (ADN)	Added	
	Proper Shipping Name (RID)	Added	
	Hazard identification number (RID)	Added	
	Colis express (express parcels) (RID)	Added	
	Special provisions for carriage - Loading, unloading and handling (RID)	Added	
	Special provisions for carriage – Packages (RID)	Added	
	Transport category (RID)	Added	
	Tank codes for RID tanks (RID)	Added	
	Portable tank and bulk container special provisions (RID)	Added	
	Portable tank and bulk container instructions (RID)	Added	
	Mixed packing provisions (RID)	Added	
	Special packing provisions (RID)	Added	
	Packing instructions (RID)	Added	
	Excepted quantities (RID)	Added	
	Limited quantities (RID)	Added	
	Special provisions (RID)	Added	
	Packing group (RID)	Added	
	Classification code (RID)	Added	
	UN-No. (RID)	Added	
	ERG code (IATA)	Added	
	Special provisions (IATA)	Added	
	CAO max net quantity (IATA)	Added	
	CAO packing instructions (IATA)	Added	
	PCA max net quantity (IATA)	Added	
	PCA packing instructions (IATA)	Added	

Safety Data Sheet

Indication of ch	anges		
Section	Changed item	Change	Comments
	PCA limited quantity max net quantity (IATA)	Added	
	PCA Limited quantities (IATA)	Added	
	PCA Excepted quantities (IATA)	Added	
	Danger labels (IATA)	Added	
	Proper Shipping Name (IATA)	Added	
	Proper Shipping Name (IMDG)	Added	
	Danger labels (IMDG)	Added	
	EmS-No. (Spillage)	Added	
	EmS-No. (Fire)	Added	
	Limited quantities (IMDG)	Added	
	Stowage category (IMDG)	Added	
	Tank special provisions (IMDG)	Added	
	Tank instructions (IMDG)	Added	
	IBC packing instructions (IMDG)	Added	
	Excepted quantities (IMDG)	Added	
	Special provisions (IMDG)	Added	
	Special provisions for carriage - Loading, unloading and handling (ADR)	Added	
	Special provisions for carriage - Packages (ADR)	Added	
	Tank code (ADR)	Added	
	Portable tank and bulk container special provisions (ADR)	Added	
	Portable tank and bulk container instructions (ADR)	Added	
	Mixed packing provisions (ADR)	Added	
	Special packing provisions (ADR)	Added	
	Packing instructions (ADR)	Added	
	Vehicle for tank carriage	Added	
	Flammability (solid, gas)	Modified	
	Type of product	Added	
1.2	Function or use category	Removed	
2.1	Adverse physicochemical, human health and environmental effects	Modified	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Added	
2.2	Precautionary statements (CLP)	Added	
2.2	Hazard statements (CLP)	Added	
2.2	Hazard pictograms (CLP)	Added	

Safety Data Sheet

Indication of change	S		
Section	Changed item	Change	Comments
2.2	EUH-statements	Removed	
3	Composition/information on ingredients	Modified	
4.1	First-aid measures general	Added	
4.2	Symptoms/effects after eye contact	Added	
4.2	Symptoms/effects after ingestion	Added	
4.2	Symptoms/effects after inhalation	Added	
4.2	Symptoms/effects after skin contact	Added	
5.2	Explosion hazard	Added	
5.2	Fire hazard	Modified	
5.2	Hazardous decomposition products in case of fire	Modified	
5.3	EAC code	Added	
5.3	Firefighting instructions	Added	
6.1	Emergency procedures	Added	
6.1	Protective equipment	Added	
6.1	General measures	Added	
6.3	For containment	Added	
7.1	Additional hazards when processed	Added	
7.2	Technical measures	Added	
7.2	Packaging materials	Added	
7.2	Storage conditions	Modified	
8.2	Personal protective equipment	Added	
9.1	Viscosity, kinematic	Modified	
9.1	Solubility in water	Modified	
9.1	Flash point	Modified	
9.1	Colour	Modified	
12.1	Ecology - general	Modified	
13.1	Sewage disposal recommendations	Added	
13.1	Additional information	Added	
13.1	Regional waste regulation	Added	
13.1	Waste disposal recommendations	Modified	
14.1	UN-No. (ADN)	Added	
14.1	UN-No. (IATA)	Added	
14.1	UN-No. (IMDG)	Added	
14.1	UN-No. (ADR)	Added	
14.2	Proper Shipping Name (ADN)	Added	
14.2	Proper Shipping Name (ADR)	Added	
14.3	Danger labels (RID)	Added	

Safety Data Sheet

Indication of changes			
Section	Changed item	Change	Comments
14.3	Danger labels (ADR)	Added	
14.3	Class (ADR)	Added	
14.4	Packing group (ADN)	Added	
14.4	Packing group (IATA)	Added	
14.4	Packing group (IMDG)	Added	
14.4	Packing group (ADR)	Added	
14.6	Special provisions (ADN)	Added	
14.6	Special packing provisions (IMDG)	Added	
14.6	Packing instructions (IMDG)	Added	
14.6	Transport category (ADR)	Added	
14.6	Special provisions (ADR)	Added	
14.6	Excepted quantities (ADR)	Added	
14.6	Limited quantities (ADR)	Added	
14.6	Tunnel restriction code (ADR)	Added	
14.6	Hazard identification number (Kemler No.)	Added	
14.6	Classification code (ADR)	Added	

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:		
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:	
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
H361f	Suspected of damaging fertility.
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.
Repr. 2	Reproductive toxicity, Category 2

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.