

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

1.1. Product identifier

Product form : Mixture
Trade name : MINERAL CUTTING OIL
Product code : 110101 / 110105 / 110112
Type of product : Use in 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 : Industrial use
Function or use category : Lubricants and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

VIRAX SAS
39, quai Marne - CS 40197
FR 51206 EPERNAY Cedex
T +33 (0)3 26 59 56 56, F +33 (0)3 26 59 56 60
hse@virax.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Edinburgh Centre) Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA	0344 892 0111	Only for healthcare professionals
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

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, Category 3 H412
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Signal word (CLP) : -
Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP) : P273 - Avoid release to the environment.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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

MINERAL CUTTING OIL

Safety Data Sheet

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

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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (Note L)	CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8	≥ 50 – < 100	Asp. Tox. 1, H304
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	CAS-No.: 95-38-5 EC-No.: 202-414-9 REACH-no: 01-2119777867-13	≥ 0,25 – < 1	Acute Tox. 4 (Oral), H302 (ATE=1265 mg/kg bodyweight) Skin Corr. 1C, H314 STOT RE 2, H373 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410

Note L: The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of dimethyl sulphoxide extract as measured by IP 346 ("Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions – Dimethyl sulphoxide extraction refractive index method" Institute of Petroleum, London), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.

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	: Immediately remove contaminated or damp clothing. In case of doubt or persistent symptoms, consult always a physician.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor. Allow affected person to breathe fresh air.
First-aid measures after skin contact	: Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Immediately rinse with water for a prolonged period while holding the eyelids wide open. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : Can occur: gastrointestinal disturbance.

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

Depending on the degree of exposure, periodic medical surveillance is required.

MINERAL CUTTING OIL

Safety Data Sheet

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Preferably: alcohol foam. Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon monoxide. Carbon dioxide.

5.3. Advice for firefighters

Firefighting instructions : Cool down the containers/equipment exposed to heat with a water spray. Ensure that there is no direct contact between the water and the product.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information : Recover waste liquids for recycling/re-use. Do not discharge into drains or the environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Evacuate unnecessary personnel. Caution : this product can cause the floor to be slippery.

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 : Stop release. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if liquid enters sewers or public waters. Do not allow product to spread into the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13. Refer to protective measures listed in Sections 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with the skin and the eyes. PREVENT GENERATION OF MISTS.
Hygiene measures : 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

Storage conditions : Store in a closed container. Keep container closed when not in use. Store in a well-ventilated place. Keep cool.
Information on mixed storage : Do not store near oxidizing agents. Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

See Section 1.

MINERAL CUTTING OIL

Safety Data Sheet

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

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

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	2 mg/kg bodyweight/day
Acute - systemic effects, inhalation	14 mg/m ³
Long-term - systemic effects, dermal	0,06 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0,46 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0,00003 mg/l
PNEC aqua (marine water)	0,000003 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,376 mg/kg dwt
PNEC sediment (marine water)	0,0376 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,075 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	0,27 mg/l

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. Only experienced and properly instructed persons should handle gases under pressure.

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure. Personal protections equipments.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Use eye protection according to EN 166, designed to protect against liquid splashes. Safety glasses

MINERAL CUTTING OIL

Safety Data Sheet

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

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves. Chemical resistant gloves (according to European standard NF ISO 374-1 or equivalent). Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Time of penetration is to be checked with the glove producer

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Protective gloves	Nitrile rubber (NBR), Chloroprene rubber (CR)	6 (> 480 minutes)	≥ 0,4		EN ISO 374

Other skin protection

Materials for protective clothing:

Take off contaminated clothing and wash it before reuse. Impermeable protective equipment. Where there is a possibility of leakage, wear the secure non-slip shoes.

8.2.2.3. Respiratory protection

Respiratory protection:

Ensure good ventilation of the work station. Do not breathe gas, fumes, vapour or spray. Wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feedingstuffs. Always wash hands after handling the product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Transparent.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not applicable
Explosive properties	: Product is not explosive.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 190 °C
Auto-ignition temperature	: The product is not easily ignited
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: 21 mm ² /s 40°C
Solubility	: Poorly soluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available

MINERAL CUTTING OIL

Safety Data Sheet

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

Density	: 0,87 g/cm ³
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

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

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

10.5. Incompatible materials

No additional information available

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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)	
LD50 oral rat	1265 mg/kg (OECD 401 method)
LD50 dermal rabbit	> 2000 mg/kg
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat	> 5000 mg/l/4h

Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
---------------------------	--

MINERAL CUTTING OIL

Safety Data Sheet

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

Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)

STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)

MINERAL CUTTING OIL

Viscosity, kinematic	21 mm ² /s 40°C
Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)	
Viscosity, kinematic	≤ 20 mm ² /s 40°C
Hydrocarbon	Yes

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

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Harmful to aquatic life with long lasting effects.
Ecology - water	: Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: Harmful to aquatic life with long lasting effects.

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)

LC50 - Fish [1]	0,3 mg/l (OECD 203 method)
-----------------	----------------------------

MINERAL CUTTING OIL

Safety Data Sheet

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

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)

EC50 - Crustacea [1]	0,136 mg/l (OECD 202 method)
EC50 72h - Algae [1]	0,03 mg/l (OECD 201 method)

Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.] (64742-54-7)

LC50 - Fish [1]	> 100 mg/l
EC50 - Crustacea [1]	> 10000 mg/l
EC50 72h - Algae [1]	> 100 mg/l
NOEC chronic crustacea	> 10 mg/l

12.2. Persistence and degradability

MINERAL CUTTING OIL

Persistence and degradability	May cause long-term adverse effects in the environment.
-------------------------------	---

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

MINERAL CUTTING OIL

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

Adverse effects on the environment 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 %.

12.7. Other adverse effects

Additional information

: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation	: Disposal must be done according to official regulations. Ensure all national/local regulations are observed.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose of this material and its container at hazardous or special waste collection point. Do not allow into drains or water courses.
European List of Waste (LoW, EC 2000/532)	: Code Waste to be completed according to the use and the list of Decision 2000/352 / EC 12 01 07* - mineral-based machining oils free of halogens (except emulsions and solutions)

MINERAL CUTTING OIL

Safety Data Sheet

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

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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)

MINERAL CUTTING OIL

Safety Data Sheet

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

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(c)	MINERAL CUTTING OIL ; 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	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
3(b)	2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol ; Distillates (petroleum), hydrotreated heavy paraffinic; Baseoil—unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40°C). It contains a relatively large proportion of saturated hydrocarbons.]	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

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 2024/590 on substances that deplete the ozone layer)

VOC Directive (2004/42)

VOC content : 0 %

Seveso Directive (Disaster Risk Reduction)

Seveso Additional information : Not relevant

Explosives Precursors Regulation (EU 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 (EC 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

Ensure all national/local regulations are observed

MINERAL CUTTING OIL

Safety Data Sheet

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

Germany

Air Quality Control (TA Luft)					
Category	Class	Applicable on	Local name	Max. mass flow	Max. mass concentration

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
1.1	Product code	Modified	
3	Composition/information on ingredients	Modified	
8.2	Personal protective equipment	Added	
9	Viscosity, kinematic	Modified	
9	Density	Modified	
11.2.	Adverse health effects caused by endocrine disrupting properties	Added	
12.6	Adverse effects on the environment caused by endocrine disrupting properties	Added	
12.6	Adverse health effects caused by endocrine disrupting properties	Added	
16	Data sources	Modified	
16	Abbreviations and acronyms	Modified	

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
IARC	International Agency for Research on Cancer
LC50	Median lethal concentration
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
SDS	Safety Data Sheet
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level

MINERAL CUTTING OIL

Safety Data Sheet

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

Abbreviations and acronyms:	
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative
CAS-No.	Chemical Abstract Service number
VOC	Volatile Organic Compounds
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
ThOD	Theoretical oxygen demand (ThOD)
ED	Endocrine disruptor
EN	European Standard
N.O.S.	Not Otherwise Specified
EC-No.	European Community number
TRGS	Technical Rules for Hazardous Substances
BLV	Biological limit value
OEL	Occupational Exposure Limit
IOELV	Indicative Occupational Exposure Limit Value
WGK	Water Hazard Class
ACGIH	American Conference of Government Industrial Hygienists
AIHA	American International Health Alliance
ANAC	National Agency for Civil Aviation
ANTAQ	National Agency for Waterway Transport
ANTT	National Overland Transport Agency
AwSV	Regulation Governing Systems for Handling Substances Hazardous to Waters (AwSV)
BetrSichV	Industrial Safety Ordinance (BetrSichV)
BS EN	British Standard
EWC	European waste catalogue
ChemOzonSchichtV	Ordinance on Substances Harmful to the Ozone Layer (ChemOzonSchichtV)
ChemVerbotsV	Prohibition of Chemicals Ordinance (ChemVerbotsV)
ChemVOCFarbV	Chemical VOC Paint Regulation (ChemVOCFarbV)
CSA	Chemical safety assessment
CWÜV	Ordinance Implementing the Chemical Weapons Convention (CWÜV)

MINERAL CUTTING OIL

Safety Data Sheet

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

Abbreviations and acronyms:	
DFG	German Research Foundation
DGUV	German Social Accident Insurance
DOT	Department of Transport
DPC	Direction of Ports and Coasts (Transport in Brazilian waters)
EINECS	European Inventory of Existing Commercial Chemical Substances
EPA	Environmental Protection Agency
PPE	Personal protection equipment
TF	Technical function
ICG	Interchangeable component group
GÜG	Precursors Monitoring Act (GÜG)
IC	Interchangeable component
ICAO	International Civil Aviation Organization
IDLH	Immediately Dangerous to Life and Health
IMO	International Maritime Organization
INSQ	Mexican national Inventory of Chemical Substances
JArbSchG	Act on the Protection of Young People in Employment (JArbSchG)
KrWaffKontrG	Weapons of War Act (KrWaffKontrG)
NDSL	Canada NDSL (Non-Domestic Substances List)
DSL	Canada DSL (Domestic Substances List)
Log Kow	Partition coefficient n-octanol/water (Log Kow)
Log Pow	Partition coefficient n-octanol/water (Log Pow)
MAK	maximum workplace concentration
MuSchG	Act on the Protection of Working Mothers (MuSchG)
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety Health Administration
RBAC	RBAC n°175 (Brazilian Regulation of Civil Aviation) - Transport of hazardous articles in civil aircraft
RMM	Risk Management Measures
SprengG	Explosive Substances Act (SprengG)
TA Luft	Technical Instructions on Air Quality Control (TA Luft)
TLV	Threshold Limit Value
TDG	Transportation of Dangerous Goods
TWA	Time Weighted Average
UFI	Unique Formula Identifier
VbF	Ordinance on Flammable Liquids (VbF)
WRMG	Detergent and Cleaning Agent Act (WRMG)

Data sources

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 . 22 ATP Inserted / Updated. Supplier's safety documents. ECHA (European Chemicals Agency).

MINERAL CUTTING OIL

Safety Data Sheet

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

Training advice	: Normal use of this product shall imply use in accordance with the instructions on the packaging. Follow advice on use, storage, maintenance and replacement.
Other information	: Ensure all national/local regulations are observed. DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
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.
H412	Harmful to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Aquatic Chronic 3	H412	Calculation method

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.