

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 17-5-2018 Revision date: 11-1-2019 Supersedes: 19-12-2018 Version: 1.2

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

1.1. Product identifier

Product form : Mixture Trade name : Mould 2000 Product code : 98.00.02 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

Intended for general public

Main use category : Industrial use, Professional use, Consumer use

Use of the substance/mixture : Release agent

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Kroon Oil BV Dollegoorweg 15 7602 EC Almelo - Netherlands

T 0031 (0)546 81 81 65

vib@kroon oil.nl

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital	Penarth CF64 2XX Cardiff	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Aspiration hazard, Category 1 H304

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

May be fatal if swallowed and enters airways

2.2. Label elements

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

Hazard pictograms (CLP)



GHS08

Signal word (CLP)

Hazardous ingredients : Mineral oil *; Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Hazard statements (CLP) : H304 - May be fatal if swallowed and enters airways.

Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children. P260 - Do not breathe mist, spray, vapours.

P301+P310+P331 - IF SWALLOWED: Immediately call a POISON CENTER or

doctor/physician. Do NOT induce vomiting.

P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation. : EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

EUH-statements

No additional information available

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments

: Highly refined mineral oils and additives.

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Mineral oil *		< 80	Asp. Tox. 1, H304
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	(EC-No.) 926-141-6 (REACH-no) 01-2119456620-43	25 - 50	Asp. Tox. 1, H304
Amines, N-(C16-18 (even numbered) and C18-unsatd. alkyl) trimethylenedi-, ethoxylated(NLP)	(CAS-No.) 1290049-56-7 (EC-No.) 800-029-6 (REACH-no) 01-2119962190-43	< 1	Acute Tox. 4 (Oral), H302 Skin Corr. 1, H314 STOT RE 1, H372 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
Diphenylamine substance with national workplace exposure limit(s) (GB)	(CAS-No.) 122-39-4 (EC-No.) 204-539-4 (EC Index-No.) 612-026-00-5 (REACH-no) 01-2119488966-13	< 0,1	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Eye Irrit. 2, H319 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Morpholine substance with a Community workplace exposure limit substance with national workplace exposure limit(s) (GB)	(CAS-No.) 110-91-8 (EC-No.) 203-815-1 (EC Index-No.) 613-028-00-9 (REACH-no) 01-2119496057-30	< 0,1	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1A, H314 Eye Dam. 1, H318

Comments

: * contains one or more of the following CAS-numbers (REACH registration numbers): 64741-88-4 (01-2119488706-23), 64741-89-5 (01-2119487067-30), 64741-95-3 (01-2119487081-40), 64741-96-4 (01-2119483621-38), 64741-97-5 (01-2119480374-36), 64742-01-4 (01-2119488707-21), 64742-52-5 (01-2119467170-45), 64742-53-6 (01-2119480375-34), 64742-54-7 (01-211948627-25), 64742-55-8 (01-2119487077-29), 64742-56-9 (01-2119480132-48), 64742-57-0 (01-2119489287-22), 64742-62-7 (01-2119480472-38), 64742-65-0 (01-2119471299-27), 64742-71-8 (01-2119485040-48), 72623-85-9 (01-2119555262-43), 72623-86-0 (01-2119474878-16), 72623-87-1 (01-2119474889-13), 74869-22-0 (01-2119495601-36)

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

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell.

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 : Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact : Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after ingestion : May result in aspiration into the lungs, causing chemical pneumonia. Risk of lung oedema.

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 : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid.

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Hazardous decomposition products in case of fire : Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other

toxic gases

5.3. Advice for firefighters

Protection during firefighting : 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, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

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".

6.2. Environmental precautions

Avoid release to 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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use. Keep in a cool, well-ventilated place away from

heat.

Storage temperature : 0 - 40 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters					
Mould 2000					
EU	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).				
Morpholine (110-91-8)	Morpholine (110-91-8)				
EU	Local name	Morpholine			
EU	IOELV TWA (mg/m³)	36 mg/m³			
EU	IOELV TWA (ppm)	10 ppm			
EU	IOELV STEL (mg/m³)	72 mg/m³			
EU	IOELV STEL (ppm)	20 ppm			
EU	Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC			
Germany	TRGS 910 Acceptable concentration notes				
United Kingdom	Local name	Morpholine			
United Kingdom	WEL TWA (mg/m³)	36 mg/m³			
United Kingdom	WEL TWA (ppm)	10 ppm			
United Kingdom	WEL STEL (mg/m³)	72 mg/m³			
United Kingdom	WEL STEL (ppm)	20 ppm			
United Kingdom	Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)			
United Kingdom	Regulatory reference	EH40/2005 (Third edition, 2018). HSE			

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Diphenylamine (122-39-4)		
Germany	TRGS 910 Acceptable concentration notes	
United Kingdom	Local name	Diphenylamine
United Kingdom	WEL TWA (mg/m³)	10 mg/m³
United Kingdom	WEL STEL (mg/m³)	20 mg/m³
United Kingdom	Regulatory reference	EH40/2005 (Third edition, 2018). HSE

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Wear suitable protective clothing

Hand protection:

Protective gloves

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR), Neoprene rubber (HNBR)	5 (> 240 minutes), 6 (> 480 minutes)	>=0,35		EN ISO 374

Eye protection:

Safety glasses

Туре	Use	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):





Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Yellow.
Odour
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : Not applicable

Freezing point : -36 °C - ASTM D5950 (pour point)

Boiling point : No data available
Flash point : 85 °C - ASTM D93 (PM)
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : Not applicable

Vapour pressure : No data available Relative vapour density at 20 °C : No data available

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Relative density : No data available

Density : 0,835 kg/l (15 °C) - ASTM D4052 Solubility : Water : Practically not miscible.

Log Pow : No data available

Viscosity, kinematic : 5,76 mm²/s (40 °C) - ASTM D7279

Viscosity, dynamic : No data available

Explosive properties : Presents no particular fire or explosion hazard.

Oxidising properties : No data available Explosive limits : No data available

9.2. Other information

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

Reacts violently with (strong) oxidizers.

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

No decomposition if stored normally.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Morpholine (110-91-8)	
LD50 oral	1050 mg/kg bodyweight
LD50 dermal	500 mg/kg bodyweight
LC50 inhalation rat (Dust/Mist - mg/l/4h)	8000 mg/m³

Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-repeated exposure : Not classified

Aspiration hazard : May be fatal if swallowed and enters airways.

Mould 2000

Viscosity, kinematic 5,76 mm²/s (40 °C) - ASTM D7279

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term

adverse effects in the environment.

Acute aquatic toxicity : Not classified Chronic aquatic toxicity : Not classified

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Willier at Oil	
LC50 fish 1	> 100 mg/l
EC50 Daphnia 1	> 10000 mg/l

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EC50 72h algae (1)	> 100 mg/l

Morpholine (110-91-8)	
LC50 fish 1	180 mg/l
EC50 other aquatic organisms 1	101 mg/l EC50 waterflea (48 h)
EC50 other aquatic organisms 2	28 mg/l IC50 algea (72 h) mg/l

Diphenylamine (122-39-4)		
EC50 Daphnia 1	0,31 mg/l (Daphnia magna, 48h)	
EC50 72h algae (1)	1,51 mg/l (72h)	
12.2. Persistence and degradability		
Diphenylamine (122-39-4)		
Biodegradation	26 % (28 d) (OECD 301D method)	
12.3. Bioaccumulative potential		
Morpholine (110-91-8)		
Log Pow	-0,86	

Diphenylamine (122-39-4)	
Log Pow	3,4 (calculated)

Amines, N-(C16-18 (even numbered) and C18-unsatd. alkyl) trimethylenedi-, ethoxylated(NLP) (1290049-56-7)	
Log Pow	2,8 @25°C

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not allow into drains or water courses. Dispose of contents/container in accordance with

licensed collector's sorting instructions.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

European List of Waste (LoW) code : 13 08 99* - wastes not otherwise specified

SECTION 14: Transport information

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

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

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14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

10.1.1. Ed-Negulations				
The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:				
3(c) 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	Morpholine			
40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	Morpholine			
3(b) 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	Mould 2000 - Mineral oil * - Morpholine			
3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	Morpholine			
3(a) 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 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	Morpholine			

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

VOC content : 0 %

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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SECTION 16: Other information					
Indication of changes:					
Section	Changed i	tem	Change	Comments	
4.1	First-aid m	easures after ingestion	Modified		
4.1	First-aid m	easures general	Modified		
Abbreviations a	nd acronyms:				
ADN		European Agreement of	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			
CLP Classification		Classification Labelling	ssification Labelling Packaging Regulation; Regulation (EC) No 1272/2008		
DMEL Derived Minimal Effect		level			
DNEL Derived-No Effect Leve		el			
EC50 Median effective conce		entration			
IARC International Agency for		or Research on Cancer			
IATA International Air Transp		port Association			
IMDG International Maritime D		Dangerous Goods			
LC50 Median lethal concentra		ation			
LD50		Median lethal dose			

LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
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	
vPvB	Very Persistent and Very Bioaccumulative	

Full text of H- and EUH-statements:	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
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
Asp. Tox. 1	Aspiration hazard, Category 1
EUH066	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Corr. 1	Skin corrosion/irritation, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1

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STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

SDS EU (REACH Annex II)

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