



Kroon-Oil Kroon-O-Sol

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 16-5-2018 Revision date: 9-2-2021 Supersedes version of: 4-1-2021 Version: 1.4

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

1.1. Product identifier

Product form : Mixture
Trade name : Kroon-Oil Kroon-O-Sol
UFI : 6CD0-F0TR-D005-X078
Product code : 09.30.03
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
Use of the substance/mixture : Degreaser

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
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+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) 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.

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2.2. Label elements

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

Hazard pictograms (CLP) :



GHS08

Signal word (CLP) : Danger
Contains : 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.
P301+P310+P331 - IF SWALLOWED: Immediately call a doctor. 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.
EUH-statements : EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

No additional information available

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]
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	(CAS-No.) 64742-47-8 (EC-No.) 926-141-6 (REACH-no) 01-2119456620-43	≥ 80	Asp. Tox. 1, H304
Alcohols, C9-11, ethoxylated	(CAS-No.) 68439-46-3 (EC-No.) 614-482-0	1 – 2,5	Eye Irrit. 2, H319
2-methylpropan-1-ol substance with national workplace exposure limit(s) (GB)	(CAS-No.) 78-83-1 (EC-No.) 201-148-0 (EC Index-No.) 603-108-00-1 (REACH-no) 01-2119484609-23	0,1 – 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.
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 : No additional information available.

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Symptoms/effects after skin contact : Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after ingestion : 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.
Hazardous decomposition products in case of fire : Toxic fumes may be released. 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

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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

Kroon-Oil Kroon-O-Sol	
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/m ³ - ACGIH TLV (inhalable fraction).

2-methylpropan-1-ol (78-83-1)

United Kingdom - Occupational Exposure Limits	
Local name	2-Methylpropan-1-ol
WEL TWA (OEL TWA) [1]	154 mg/m ³
WEL TWA (OEL TWA) [2]	50 ppm
WEL STEL (OEL STEL)	231 mg/m ³
WEL STEL (OEL STEL) [ppm]	75 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

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 symbol(s):



8.2.2.1. Eye and face protection

Eye protection:
Safety glasses

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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

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

Other skin protection

Materials for protective clothing:

Wear suitable protective clothing

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

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	: red.
Odour	: characteristic.
Odour threshold	: No data available
pH	: 8
pH solution	: 10 vol %
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: -45 °C - ASTM D5950 (pour point)
Boiling point	: No data available
Flash point	: 72 °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
Relative density	: No data available
Density	: 0,798 kg/l (15 °C) - ASTM D4052
Solubility	: Emulsifiable in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: 1,6 mm ² /s (40 °C) - ASTM D7279

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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

No dangerous reactions known under normal conditions of use. 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

2-methylpropan-1-ol (78-83-1)

LD50 oral rat	2830 mg/kg
LD50 dermal rabbit	2460 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	24,6 mg/l/4h

Alcohols, C9-11, ethoxylated (68439-46-3)

LD50 oral rat	> 5000 mg/kg
LD50 dermal	> 2000 mg/kg
LC50 Inhalation - Rat	> 20 mg/l

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)

LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401 method)
LD50 dermal rabbit	> 5000 mg/kg bodyweight 24h - (OECD 402 method)
LC50 Inhalation - Rat	> 5000 mg/m ³ 8h - vapours (OECD 403 method)

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Skin corrosion/irritation	: Not classified pH: 8
Serious eye damage/irritation	: Not classified pH: 8
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

2-methylpropan-1-ol (78-83-1)

STOT-single exposure	May cause respiratory irritation. May cause drowsiness or dizziness.
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STOT-repeated exposure	: Not classified
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2-methylpropan-1-ol (78-83-1)

NOAEL (oral, rat, 90 days)	> 1450 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
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Aspiration hazard	: May be fatal if swallowed and enters airways.
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Viscosity, kinematic	1,6 mm ² /s (40 °C) - ASTM D7279
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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.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified
Not rapidly degradable	

2-methylpropan-1-ol (78-83-1)

LC50 - Fish [1]	1430 mg/l (Pimephales promelas, 96h)
EC50 - Crustacea [1]	1030 mg/l (Daphnia magna, 48h)
NOEC (chronic)	20 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

Alcohols, C9-11, ethoxylated (68439-46-3)

LC50 - Fish [1]	1 – 10 mg/l 96h
EC50 - Crustacea [1]	1 – 10 mg/l 48h
ErC50 algae	1 – 10 mg/l 72h

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)

LC50 - Fish [1]	> 1000 mg/l (OECD 203 method)
EC50 - Crustacea [1]	> 1000 mg/l (OECD 202 method)

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EC50 72h - Algae [1]	> 1000 mg/l (OECD 201 method)
NOEC chronic crustacea	1,22 g/l (21d)
NOEC chronic algae	1000 mg/l (OECD 201 method)

12.2. Persistence and degradability

Alcohols, C9-11, ethoxylated (68439-46-3)	
Persistence and degradability	Readily biodegradable.
BOD (% of ThOD)	> 60 % ThOD 28 d, Closed Bottle Test (OECD 301D)

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
Biodegradation	69 % (28d) (OECD 301F method)

12.3. Bioaccumulative potential

2-methylpropan-1-ol (78-83-1)	
Partition coefficient n-octanol/water (Log Pow)	0,79

Alcohols, C9-11, ethoxylated (68439-46-3)	
Partition coefficient n-octanol/water (Log Pow)	2,4
Bioaccumulative potential	Bioaccumulation unlikely.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component	
Alcohols, C9-11, ethoxylated (68439-46-3)	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. 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	: 11 01 99 - wastes not otherwise specified

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

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14.2. UN proper shipping name

Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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14.3. Transport hazard class(es)

Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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14.4. Packing group

Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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14.5. Environmental hazards

Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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No supplementary information available

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

Contains no REACH substances with Annex XVII restrictions

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.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

VOC content	: 0 %
Child-resistant fastening	: Applicable
Tactile warning	: Applicable

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 item	Change	Comments
	Revision date	Modified	
	Supersedes	Modified	
1.2	Main use category	Modified	
4.2	Symptoms/effects	Modified	
4.2	Symptoms/effects after ingestion	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
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
IATA	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
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

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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:	
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 Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

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.