



KROSS

Empowering Oil



4T - 10W-40

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

Product identifier

Trade name: 4T - 10W40

Article number:

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

Sector of Use

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
PC24 Lubricants, greases, release products

Process category

PROC2 Use in closed, continuous process with occasional controlled exposure
PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities
PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
PROC20 Heat and pressure transfer fluids in dispersive, professional use but closed systems

Environmental release category

ERC9a Wide dispersive indoor use of substances in closed systems
ERC9b Wide dispersive outdoor use of substances in closed systems

Application of the substance / the preparation

Engine oil

SECTION 2: Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The product is not classified according to the CLP regulation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC
Not applicable.

Information concerning particular hazards for human and environment:
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

Label elements

Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals.
The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

Special labelling of certain preparations:

Contains Calcium long chain alkaryl sulfonate. May produce an allergic reaction.

Safety data sheet available for professional user on request.

Other hazards

Results of PBT and vPvB

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

Polymer	polyolefin polyamine succinimide, borated	R53 Aquatic Chronic 4, H413	1-2.5%
Polymer	polyolefin polyamine succinimide	R53 Aquatic Chronic 4, H413	1-2.5%

Additional information:

For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

Description of first aid measures

General information:

No special measures required.

After inhalation:

Supply fresh air; consult doctor in case of complaints.

After skin contact:

Generally the product does not irritate the skin.

After eye contact:

Rinse opened eye for several minutes under running water.

After swallowing:

Do not induce vomiting; call for medical help immediately.

Information for doctor:

Indication of any immediate medical attention and special treatment needed
If swallowed or in case of vomiting, danger of entering the lungs.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

CO₂, dry chemical, or foam. Water can be used to cool and protect exposed material.

For safety reasons unsuitable extinguishing agents: Water with full jet

Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

SECTION 6: Accidental release measures

· Personal precautions, protective equipment and emergency procedures Wear protective clothing.

· Environmental precautions: Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Remove from the water surface (e.g. skim or suck off).



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Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

SECTION 7: Handling and storage

Handling:

Precautions for safe handling

No special measures required.

Avoid the formation of oil haze.

Information about fire - and explosion protection:

No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Information about storage in one common storage facility:

Not required.

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities:

No further data; see item 7.

Control parameters

Ingredients with limit values that require monitoring at the workplace:

Contains mineral oil. Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH STEL of 10 mg per cubic meter.

Additional information: The lists valid during the making were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Wash hands before breaks and at the end of work.

Respiratory protection: Not required.

Protection of hands: Oil resistant gloves

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Nitrile rubber, NBR

PVC gloves

Neoprene gloves

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Goggles recommended during refilling

Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form:	Liquid
Colour:	Brown
Odour:	Characteristic

Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

Drip point:

Pour point	-30 °C
Flash point:	> 110°C
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	354°C
Self-igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.

Explosion limits:

Lower:	Not determined.
Upper:	Not determined.
Density at 20°C:	0.87 g/cm ³
Solubility in / Miscibility with water:	Not miscible or difficult to mix.
Segregation coefficient (n-octanol/water):	Not determined.

Viscosity:

40°C	101 mm ² /s
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Solvent content:	
Organic solvents:	0.0 %

Other information

No further relevant information available.

SECTION 10: Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided:

To avoid thermal decomposition do not overheat.

Possibility of hazardous reactions Reacts with strong oxidizing agents.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin:	No irritant effect.
on the eye:	No irritating effect.
Sensitization:	No sensitizing effects known.

Additional toxicological information:

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 test.



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SECTION 12: Ecological information

Toxicity

Acquatic toxicity:	No further relevant information available.
Persistence and degradability	No further relevant information available.
Other information:	The product is difficultly biodegradable.

Behaviour in environmental systems:

Bioaccumulative potential	No further relevant information available.
Mobility in soil	No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

Results of PBT and vPvB assessment

PBT:	Not applicable.
vPvB:	Not applicable.

Other adverse effects

No further relevant information available.

SECTION 13: Disposal considerations

Waste treatment methods

Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue

13 02 05 mineral-based non-chlorinated engine, gear and lubricating oils

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

Land transport ADR/RID (cross-border)

ADR/RID class: -

Maritime transport IMDG:

IMDG Class: -
Marine pollutant: No

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: -
UN "Model Regulation": -
Special precautions for user Not applicable.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

SECTION 15: Regulatory information

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

National regulations:

Waterhazard class: Water hazard class 2 (Self-assessment):
hazardous for water.

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H413	May cause long lasting harmful effects to aquatic life.
R53	May cause long-term adverse effects in the aquatic environment.

Department issuing MSDS: Product safety department.

Contact: Product safety department

Abbreviations and acronyms:

ADR:	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID:	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG:	International Maritime Code for Dangerous Goods
IATA:	International Air Transport Association
IATA-DGR:	Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO:	International Civil Aviation Organization
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals

Sources

67/548/EEC - Dangerous Substances Directive

99/45/EEC - Dangerous Preparations Directive

*** Data compared to the previous version altered.**