



KROSS

Empowering Oil



AGRO TDTO 10

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

1.1. Product identifier

Product form : Mixture
Product name : TDTO 10
Product code :
Product group : Blend

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, Professional use, Consumer use
Industrial/Professional use spec. : Non-dispersive use
Used in closed systems
Function or use category : Lubricants and additives

1.2.2. Uses advised against

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC

R52/53

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labeling according to Directive 67/548/EEC or 1999/45/EC

R-phrases : R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrases : S2 - Keep out of the reach of children.
S35 - This material and its container must be disposed of in a safe way.
S56 - Dispose of this material and its container to hazardous or special waste collection point.
S61 - Avoid release to the environment. Refer to special instructions/safety data sheets.

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 Directive 67/548/EEC
Calcium long-chain alkylphenate sulfide		1 - 2,5	R53
Zinc dialkyl dithiophosphate (EC no) 272-028-3	(CAS No.) 68649-42-3	1 - 2	Xi; R41 Xi; R38 N; R51/53

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Calcium long-chain alkylphenate sulfide		1 - 2,5	Aquatic Chronic 4, H413
Zinc dialkyl dithiophosphate (EC no) 272-028-3	(CAS No.) 68649-42-3	1 - 2	Eye Dam. 1, H318 Skin Irrit. 2, H315 Aquatic Chronic 2, H411

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Not expected to require first aid measures.
First-aid measures after skin contact : Wash skin with mild soap and water.
First-aid measures after eye contact : In case of eye contact, immediately rinse with clean water for 10-15 minutes.
First-aid measures after ingestion : Do not induce vomiting. Rinse mouth. Get immediate medical advice/attention.

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

Symptoms/injuries after inhalation : Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Symptoms/injuries after skin contact : Not expected to present a significant skin hazard under anticipated conditions of normal use.
Symptoms/injuries after eye contact : Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
Symptoms/injuries after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water fog. Foam. Powder. Dry chemical product.

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

5.2. Special hazards arising from the substance or mixture

Reactivity : None under normal conditions.



KROSS

Empowering Oil

5.3. Advice for firefighters

Precautionary measures fire :	Exercise caution when fighting any chemical fire.
Firefighting instructions :	Use water spray or fog for cooling exposed containers.
Protection during firefighting :	Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear suitable protective clothing and gloves.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and gloves.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment :	Impound and recover large spill by mixing it with inert granular solids.
Methods for cleaning up :	Detergent. Take up liquid spill into absorbent material sand, saw dust, kieselguhr.
Other information :	Spill area may be slippery. Use suitable disposal containers.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling :	Avoid all unnecessary exposure. Both local exhaust and general room ventilation are usually required.
Handling temperature :	< 40 °C
Hygiene measures :	Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage temperature :	< 40 °C
Storage area :	Store in dry, cool, well-ventilated area.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional information :	5 mg/m ³ for oil mists (TWA, 8h-workday) recommended, based upon the ACGIH TLV (Analysis according to US NIOSH Method 5026, NIOSH Manual of Analytical Methods, 3rd Edition).
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8.2. Exposure controls

Personal protective equipment :	Safety glasses. Gloves.
Hand protection :	Wear suitable gloves resistant to chemical penetration.
Skin and body protection :	No special clothing/skin protection equipment is recommended under normal conditions of use.
Respiratory protection :	No special respiratory protection equipment is recommended under normal conditions

of use with adequate ventilation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state :	Liquid
Appearance :	Oily liquid.
Colour :	Yellow-brown.
Odour :	Characteristic.
Odour threshold :	No data available
pH :	No data available
Relative evaporation rate (butylacetate=1) :	No data available
Melting point :	No data available
Solidification point :	No data available
Boiling point :	No data available
Flash point :	214 °C @ ASTM D92
Self ignition temperature :	No data available
Decomposition temperature :	No data available
Flammability (solid, gas) :	No data available
Vapour pressure :	No data available
Relative vapour density at 20 °C :	No data available
Relative density :	No data available
Density :	882 kg/m ³ @15°C
Solubility :	Slightly soluble, the product remains on the water surface.
Log Pow :	No data available
Log Kow :	No data available
Viscosity, kinematic :	36 mm ² /s @ 40°C
Viscosity, dynamic :	No data available
Explosive properties :	No data available
Oxidising properties :	No data available
Explosive limits :	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal conditions.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

Strong oxidizers. acids. Bases.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity :	Not classified
Irritation :	Not classified
Corrosivity :	Not classified
Sensitisation :	Not classified
Repeated dose toxicity :	Not classified
Carcinogenicity :	Not classified
Mutagenicity :	Not classified
Reproductive toxicity :	Not classified



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SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

KROSS TDTO 10 Persistence and degradability Not soluble in water, so only minimally biodegradable.

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

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Additional information : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

No dangerous good in sense of transport regulations.

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

Not applicable

14.6.2. Transport by sea

Not applicable

14.6.3. Air transport

Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 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

No Annex XVII restrictions

Contains no REACH candidate substance

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Other information : 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 MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

Full text of R-, H- and EUH-phrases:

Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment - Chronic Hazard Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Irrit. 2	skin corrosion/irritation Category 2
H315	Causes skin irritation
H318	Causes serious eye damage
H411	Toxic to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life
R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53	May cause long-term adverse effects in the aquatic environment.
N	Dangerous for the environment
Xi	Irritant

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.