# Nordlub TDTO-ZF SAE 30

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 20/06/2005 Revision date: 12/12/2023 Supersedes version of: 28/02/2023 Version: 7.4

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

### 1.1. Product identifier

Product form : Mixture
Product name : Nordlub TDTO-ZF SAE 30
Product code : 3123
Type of product : NORDLUB
Product group : Blend
Other means of identification : Art.-Nr.: 11051

### 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

### 1.3. Details of the supplier of the safety data sheet

NORDLUB Deutschland GmbH
Lange Str. 49
D-21614 Buxtehude
Deutschland / Germany
T +49 (0)4161 / 55 905 - 0 - F +49 (0)4161 / 55 905 - 29
info@nordlub.de - www.nordlub.de

### 1.4. Emergency telephone number

Emergency number : +49 (0)4161 / 55 905 - 0

| Country | Organisation/Company | Address | Emergency number | Comment |
|---|---|---|---|---|
| Ireland | National Poisons Information Centre<br>Beaumont Hospital | PO Box 1297<br>Beaumont Road<br>9 | +353 1 809 2566 (Healthcare professionals-24/7)<br>+353 1 809 2166 (public, 8am - 10pm, 7/7) | |
| Israel | Israel Poison Information Center<br>Rambam Health Care Campus | 6 Ha'Aliya Street<br>31096 | +972 4 854 1900 | |
| Malta | Medicines & Poisons Info Office | Mater Dei Hospital<br>Msida<br>MSD 2090 | +356 2545 6508 | |
| Sweden | Giftinformationscentralen | Box 60 500<br>171 76 Stockholm | 112 – begär Giftinformation<br>+46 10 456 6700 (Från utlandet) | |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Not classified

### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

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

EUH-statements : EUH208 - Contains dihydro-3-(tetrapropenyl)furan-2,5-dione. May produce an allergic reaction.
EUH210 - Safety data sheet available on request.

## 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

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 is 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

Comments : The mineral oils in the product contain < 3% DMSO extract (IP 346)

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| Distillates (petroleum), hydrotreated heavy paraffinic | CAS-No.: 64742-54-7<br>EC-No.: 265-157-1<br>EC Index-No.: 649-467-00-8<br>REACH-no: 01-2119484627-25 | 3.575 | Not classified |
| dihydro-3-(tetrapropenyl)furan-2,5-dione | CAS-No.: 26544-38-7<br>EC-No.: 247-781-6<br>REACH-no: 01-2119979080-37 | 0.1 – 0.99 | Eye Irrit. 2, H319<br>Skin Sens. 1, H317<br>Aquatic Chronic 4, H413 |

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

Symptoms/effects 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

No additional information available

### 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 eating, drinking or smoking 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

#### 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

Additional information : 5 mg/m3 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).

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

No additional information available

#### 8.2.2. Personal protection equipment

**Personal protective equipment:**
Safety glasses. Gloves.

**Personal protective equipment symbol(s):**

#### 8.2.2.1. Eye and face protection

No additional information available

#### 8.2.2.2. Skin protection

**Skin and body protection:**
No special clothing/skin protection equipment is recommended under normal conditions of use

**Hand protection:**
Permeation time: minimum >480min long term exposure; material / thickness [mm]: >0,35 mm. Nitrile rubber (NBR) /

#### 8.2.2.3. Respiratory protection

**Respiratory protection:**
No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation.

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

No additional information available

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | | |
|---|---|---|
| Physical state | : | Liquid |
| Colour | : | brown. |
| Appearance | : | Oily liquid. |
| Odour | : | Characteristic. |
| Odour threshold | : | Not available |
| Melting point | : | Not available |
| Freezing point | : | Not available |
| Boiling point | : | Not available |
| Flammability | : | Not available |
| Lower explosion limit | : | Not available |
| Upper explosion limit | : | Not available |
| Flash point | : | > 180 °C @ ASTM D92 |
| Auto-ignition temperature | : | Not available |
| Decomposition temperature | : | Not available |
| pH | : | Not available |
| Viscosity, kinematic | : | 76 mm²/s @ 40°C |
| Solubility | : | Slightly soluble, the product remains on the water surface. |
| Partition coefficient n-octanol/water (Log Kow) | : | Not available |
| Vapour pressure | : | Not available |
| Vapour pressure at 50°C | : | Not available |
| Density | : | 860 kg/m³ @15°C |
| 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

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

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

| dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7) | |
|---|---|
| LD50 oral rat | 2900 mg/kg |
| LD50 dermal rabbit | > 5000 mg/kg |
| LC50 Inhalation - Rat (Dust/Mist) | 5.3 mg/l/4h |

| Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7) | |
|---|---|
| LD50 dermal rabbit | > 5000 mg/kg |

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

| dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7) | |
|---|---|
| NOAEL (subacute, oral, animal/male, 28 days) | 300 mg/kg bodyweight |

Aspiration hazard : Not classified

| Nordlub TDTO-ZF SAE 30 | |
|---|---|
| Viscosity, kinematic | 76 mm²/s @ 40°C |

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

| dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7) | |
|---|---|
| LC50 - Fish [1] | > 100 mg/l |
| EC50 - Crustacea [1] | > 100 mg/l |
| EC50 72h - Algae [1] | 160 mg/l |
| NOEC chronic algae | 33 mg/l |

### 12.2. Persistence and degradability

| Nordlub TDTO-ZF SAE 30 | |
|---|---|
| Persistence and degradability | Not soluble in water, so only minimally biodegradable. |

| dihydro-3-(tetrapropenyl)furan-2,5-dione (26544-38-7) | |
|---|---|
| Biodegradation | 9.9 % |

### 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. Endocrine disrupting properties

No additional information available

### 12.7. 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 / IMDG / IATA / ADN / RID

### 14.1. UN number or ID number

Not regulated for transport

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

### 14.3. Transport hazard class(es)

**ADR**
Transport hazard class(es) (ADR) : Not applicable

**IMDG**
Transport hazard class(es) (IMDG) : Not applicable

**IATA**
Transport hazard class(es) (IATA) : Not applicable

**ADN**
Transport hazard class(es) (ADN) : Not applicable

**RID**
Transport hazard class(es) (RID) : Not applicable

### 14.4. Packing group

| | | |
|---|---|---|
| Packing group (ADR) | : | Not applicable |
| Packing group (IMDG) | : | Not applicable |
| Packing group (IATA) | : | Not applicable |
| Packing group (ADN) | : | Not applicable |
| Packing group (RID) | : | Not applicable |

### 14.5. Environmental hazards

Other information : No supplementary information available

### 14.6. Special precautions for user

**Overland transport**
No data available

**Transport by sea**
No data available

**Air transport**
No data available

**Inland waterway transport**
No data available

**Rail transport**
No data available

### 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)**

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

**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 1005/2009 on substances that deplete the ozone layer)

**Explosives Precursors Regulation (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 (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

#### Germany

| | | |
|---|---|---|
| Water hazard class (WGK) | : | WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1). |
| Storage class (LGK, TRGS 510) | : | LGK 10-13 - Other combustible and non-combustible substances. |
| Hazardous Incident Ordinance (12. BImSchV) | : | Is not subject of the Hazardous Incident Ordinance (12. BImSchV) |

#### Netherlands

| | | |
|---|---|---|
| SZW-lijst van kankerverwekkende stoffen | : | Distillates (petroleum), hydrotreated heavy paraffinic is listed |
| SZW-lijst van mutagene stoffen | : | Distillates (petroleum), hydrotreated heavy paraffinic is listed |
| SZW-lijst van reprotoxische stoffen – Borstvoeding | : | None of the components are listed |
| SZW-lijst van reprotoxische stoffen – Vruchtbaarheid | : | None of the components are listed |
| SZW-lijst van reprotoxische stoffen – Ontwikkeling | : | None of the components are listed |

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

# SECTION 16: Other information

| Indication of changes | | | |
|---|---|---|---|
| **Section** | **Changed item** | **Change** | **Comments** |
| | Revision date | Modified | |
| | Supersedes | Modified | |

| Abbreviations and acronyms: | |
|---|---|
| | ACGIH: American Conference of Governmental Industrial Hygienists |
| | TWA: Time Weighted Average |
| | TLV: Threshold Limit Value |
| | ASTM: American Society for Testing and Materials |
| | ADR: Accord Européen Relatif au Transport International des Marchandises Dangereuses par Route |
| | RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail |
| | ADNR: Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin |
| | IMDG: International Maritime Dangerous Goods |
| | ICAO: International Civil Aviation Organization |
| | IATA: International Air Transport Association |
| | STEL: Short Term Exposure Limit |
| | LD50: median Lethal Dose for 50% of subjects |
| | ATE: acute toxicity estimate |
| | LC50: median Lethal Concentration for 50% of subjects |
| | EC50: concentration producing 50% effect |

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 H- and EUH-statements: | |
|---|---|
| Aquatic Chronic 4 | Hazardous to the aquatic environment – Chronic Hazard, Category 4 |
| EUH208 | Contains dihydro-3-(tetrapropenyl)furan-2,5-dione. May produce an allergic reaction. |
| EUH210 | Safety data sheet available on request. |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H413 | May cause long lasting harmful effects to aquatic life. |
| Skin Sens. 1 | Skin sensitisation, Category 1 |

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.