



MAROIL S.R.L.

Revision nr. 16

Dated 12/12/2023

T&D Synthetic Oil 75W-90

Printed on 12/12/2023

Page n. 1/16

Replaced revision:15 (Printed on: 10/11/2022)

## Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

#### 1.1. Product identifier

Code: M 425  
Product name: T&D Synthetic Oil 75W-90

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use: Lubricating oil for transmissions and differentials

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

Name: MAROIL S.R.L.  
Full address: LOC. PONTE ALLA CILIEGIA  
District and Country: 55011 MARGINONE ALTOPASCIO (LU)  
ITALIA  
Tel. 0583/28731  
Fax 0583/286542

e-mail address of the competent person responsible for the Safety Data Sheet: msds@bardahl.it

#### 1.4. Emergency telephone number

For urgent inquiries refer to:  
Numeri telefonici dei principali Centri Antiveleni italiani (attivi 24/24 ore)  
Centro Antiveleni di Pavia 0382 24444 (CAV IRCCS Fondazione Maugeri - Pavia)  
Centro Antiveleni di Milano 02 66101029 (CAV Ospedale Niguarda Ca' Granda - Milano)  
Centro Antiveleni di Bergamo 800 883300 (CAV Ospedali Riuniti - Bergamo)  
Centro Antiveleni di Firenze 055 7947819 (CAV Ospedale Careggi - Firenze)  
Centro Antiveleni di Roma 06 3054343 (CAV Policlinico Gemelli - Roma)  
Centro Antiveleni di Roma 06 49978000 (CAV Policlinico Umberto I - Roma)  
Centro Antiveleni di Napoli 081 7472870 (CAV Ospedale Cardarelli - Napoli)

### SECTION 2. Hazards identification

#### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Hazardous to the aquatic environment, chronic toxicity, category 3      H412      Harmful to aquatic life with long lasting effects.

**T&D Synthetic Oil 75W-90****2.2. Label elements**

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms: --

Signal words: --

Hazard statements:

**H412** Harmful to aquatic life with long lasting effects.

**EUH208** Contains: Magnesium metaborate, Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentoxide, and salted by amines, C12-14- tert-alkyl, Polysulfides, di-tert-Bu  
May produce an allergic reaction.

Precautionary statements:

**P501** Dispose of contents / container in accordance with national regulations.

**P273** Avoid release to the environment.

**P101** If medical advice is needed, have product container or label at hand.

**P102** Keep out of reach of children.

**2.3. Other hazards**

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

**SECTION 3. Composition/information on ingredients****3.2. Mixtures**

Contains:

| Identification  | x = Conc. %      | Classification (EC) 1272/2008 (CLP)  |
|---|------------------|--|
| <b>Polysulfides, di-tert-Bu</b>                               |                  |  |
| INDEX -   | $4,5 \leq x < 5$ | Skin Sens. 1B H317, Aquatic Chronic 3 H412   |
| EC 273-103-3  |                  | Skin Sens. 1B H317: $\geq 46\%$  |
| CAS 68937-96-2  |                  |  |
| REACH Reg. 01-2119540515-43                                   |                  |  |
| <b>distillates (petroleum), hydrotreated heavy paraffinic</b> |                  |  |
| INDEX -   | $3,5 \leq x < 4$ | Asp. Tox. 1 H304, Classification note according to Annex VI to the CLP Regulation: L |
| EC 265-157-1  |                  |  |
| CAS 64742-54-7  |                  |  |



MAROIL S.R.L.

Revision nr. 16

Dated 12/12/2023

Printed on 12/12/2023

Page n. 3/16

Replaced revision:15 (Printed on: 10/11/2022)

## T&D Synthetic Oil 75W-90

REACH Reg. 01-2119484627-25

**distillates (petroleum) solvent-dewaxed light paraffinic**

INDEX -

$3 \leq x < 3,5$

Asp. Tox. 1 H304, Classification note according to Annex VI to the CLP Regulation: L

EC 265-159-2

CAS 64742-56-9

REACH Reg. 01-2119480132-48

**distillates (petroleum), solvent-dewaxed heavy paraffinic**

INDEX -

$3 \leq x < 3,5$

Asp. Tox. 1 H304, Classification note according to Annex VI to the CLP Regulation: L

EC 265-169-7

CAS 64742-65-0

REACH Reg. 01-2119471299-27

**Mineral oil**

INDEX

$2 \leq x < 2,5$

Asp. Tox. 1 H304

EC

CAS -

REACH Reg. Miscela

**Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl**

INDEX -

$2 \leq x < 2,5$

Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Sens. 1B H317, Aquatic Chronic 2 H411

EC 931-384-6

CAS -

Skin Sens. 1B H317:  $\geq 9,39\%$ , Eye Irrit. 2 H319:  $\geq 50,01\%$

LD50 Oral: 2000 mg/kg

REACH Reg. 01-2119493620-38

**Magnesium metaborate**

INDEX -

$0,5 \leq x < 0,6$

Skin Sens. 1B H317

EC 237-235-5

Skin Sens. 1B H317:  $\geq 15\%$

CAS 13703-82-7

REACH Reg. 01-2120769073-53

The full wording of hazard (H) phrases is given in section 16 of the sheet.

Mineral oil

The mineral oil contained can be described by one or more of the following: EC No. 265-157-1, Registration No. 01-2119484627-25, Distillates (petroleum), hydrotreated heavy paraffinic; EC No. 265-169-7, Registration No. 01-2119471299-27, Distillates (petroleum), solvent-dewaxed heavy paraffinic; EC No. 265-158-7, Registration No. 01-2119487077-29, Distillates (petroleum), hydrotreated light paraffinic; EC No. 265-159-2, Registration No. 01-2119480132-48, Distillates (petroleum), solvent-dewaxed light paraffinic.

## SECTION 4. First aid measures

### 4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing



MAROIL S.R.L.

Revision nr. 16

Dated 12/12/2023

**T&D Synthetic Oil 75W-90**

Printed on 12/12/2023

Page n. 4/16

Replaced revision:15 (Printed on: 10/11/2022)

before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

## SECTION 5. Firefighting measures

### 5.1. Extinguishing media

#### SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

#### UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

### 5.2. Special hazards arising from the substance or mixture

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

### 5.3. Advice for firefighters

#### GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

## SECTION 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

### 6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

**T&D Synthetic Oil 75W-90**

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

**6.4. Reference to other sections**

Any information on personal protection and disposal is given in sections 8 and 13.

**SECTION 7. Handling and storage****7.1. Precautions for safe handling**

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

**7.2. Conditions for safe storage, including any incompatibilities**

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

**7.3. Specific end use(s)**

Information not available

**SECTION 8. Exposure controls/personal protection****8.1. Control parameters**

Regulatory references:

ITA Italia Decreto Legislativo 9 Aprile 2008, n.81

**Polysulfides, di-tert-Bu**

Predicted no-effect concentration - PNEC

|   |        |       |
|---|--------|-------|
| Normal value in fresh water                           | 0,24   | µgr/l |
| Normal value in marine water                          | 0,024  | µgr/l |
| Normal value for fresh water sediment                 | 0,94   | mg/kg |
| Normal value for marine water sediment                | 0,094  | mg/kg |
| Normal value of STP microorganisms                    | 4,51   | mg/l  |
| Normal value for the food chain (secondary poisoning) | 6,66   | mg/kg |
| Normal value for the terrestrial compartment          | 0,0181 | mg/kg |

**Health - Derived no-effect level - DNEL / DMEL**

| Route of exposure | Effects on consumers |                |               | Effects on workers |             |                |               |                  |
|-------------------|----------------------|----------------|---------------|--------------------|-------------|----------------|---------------|------------------|
|                   | Acute local          | Acute systemic | Chronic local | Chronic systemic   | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral              |                      |                |               | 0,167 mg/kg        |             |                |               |                  |
| Inhalation        |                      |                |               | 0,58 mg/m3         |             |                | 3,29 mg/m3    |                  |
| Skin              |                      |                |               | 1,67 mg/kg         |             |                | 4,67 mg/kg    |                  |

**Mineral oil****Threshold Limit Value**



MAROIL S.R.L.

Revision nr. 16

Dated 12/12/2023

T&D Synthetic Oil 75W-90

Printed on 12/12/2023

Page n. 6/16

Replaced revision:15 (Printed on: 10/11/2022)

| Type | Country | TWA/8h | STEL/15min | Remarks / Observations |
|------|---------|--------|------------|------------------------|
|      |         | mg/m3  | ppm        |                        |
|      |         | mg/m3  | ppm        |                        |

|      |     |   |  |  |
|------|-----|---|--|--|
| VLEP | ITA | 5 |  |  |
|------|-----|---|--|--|

Predicted no-effect concentration - PNEC

|   |      |       |
|---|------|-------|
| Normal value for the food chain (secondary poisoning) | 9,33 | mg/kg |
|---|------|-------|

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers |                |               |                  | Effects on workers |                |               |                  |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
|                   | Acute local          | Acute systemic | Chronic local | Chronic systemic | Acute local        | Acute systemic | Chronic local | Chronic systemic |

|      |  |  |  |            |  |  |  |  |
|------|--|--|--|------------|--|--|--|--|
| Oral |  |  |  | 0,74 mg/kg |  |  |  |  |
|------|--|--|--|------------|--|--|--|--|

|            |  |  |            |  |  |  |            |            |
|------------|--|--|------------|--|--|--|------------|------------|
| Inhalation |  |  | 1,19 mg/m3 |  |  |  | 5,58 mg/m3 | 2,73 mg/m3 |
|------------|--|--|------------|--|--|--|------------|------------|

|      |  |  |  |  |  |  |  |            |
|------|--|--|--|--|--|--|--|------------|
| Skin |  |  |  |  |  |  |  | 0,97 mg/kg |
|------|--|--|--|--|--|--|--|------------|

Magnesium metaborate

Predicted no-effect concentration - PNEC

|                             |      |      |
|-----------------------------|------|------|
| Normal value in fresh water | 0,05 | mg/l |
|-----------------------------|------|------|

|                              |      |      |
|------------------------------|------|------|
| Normal value in marine water | 0,05 | mg/l |
|------------------------------|------|------|

|                                       |      |       |
|---------------------------------------|------|-------|
| Normal value for fresh water sediment | 1,38 | mg/kg |
|---------------------------------------|------|-------|

|  |      |       |
|--|------|-------|
| Normal value for marine water sediment | 1,38 | mg/kg |
|--|------|-------|

|                                    |     |      |
|------------------------------------|-----|------|
| Normal value of STP microorganisms | 100 | mg/l |
|------------------------------------|-----|------|

|   |      |       |
|---|------|-------|
| Normal value for the food chain (secondary poisoning) | 1,67 | mg/kg |
|---|------|-------|

|  |       |       |
|--|-------|-------|
| Normal value for the terrestrial compartment | 0,247 | mg/kg |
|--|-------|-------|

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers |                |               |                  | Effects on workers |                |               |                  |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
|                   | Acute local          | Acute systemic | Chronic local | Chronic systemic | Acute local        | Acute systemic | Chronic local | Chronic systemic |

|      |  |  |  |            |  |  |  |  |
|------|--|--|--|------------|--|--|--|--|
| Oral |  |  |  | 0,28 mg/kg |  |  |  |  |
|------|--|--|--|------------|--|--|--|--|

|            |  |  |  |            |  |  |            |  |
|------------|--|--|--|------------|--|--|------------|--|
| Inhalation |  |  |  | 0,82 mg/m3 |  |  | 5,49 mg/m3 |  |
|------------|--|--|--|------------|--|--|------------|--|

|      |  |  |  |             |  |  |            |  |
|------|--|--|--|-------------|--|--|------------|--|
| Skin |  |  |  | 0,278 mg/kg |  |  | 7,78 mg/kg |  |
|------|--|--|--|-------------|--|--|------------|--|

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374). The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability. The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.



MAROIL S.R.L.

Revision nr. 16

Dated 12/12/2023

T&D Synthetic Oil 75W-90

Printed on 12/12/2023

Page n. 7/16

Replaced revision:15 (Printed on: 10/11/2022)

#### SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

#### EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

#### RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

#### ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

## SECTION 9. Physical and chemical properties

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

| Properties                             | Value          | Information |
|--|----------------|-------------|
| Appearance                             | liquid         |             |
| Colour                                 | yellow         |             |
| Odour                                  | characteristic |             |
| Melting point / freezing point         | not available  |             |
| Initial boiling point                  | not available  |             |
| Flammability                           | not available  |             |
| Lower explosive limit                  | not available  |             |
| Upper explosive limit                  | not available  |             |
| Flash point                            | 138 °C         |             |
| Auto-ignition temperature              | not available  |             |
| Decomposition temperature              | not available  |             |
| pH                                     | not available  |             |
| Kinematic viscosity                    | 96 cSt         |             |
| Solubility                             | insoluble      |             |
| Partition coefficient: n-octanol/water | not available  |             |
| Vapour pressure                        | not available  |             |
| Density and/or relative density        | 0,878 kg/l     |             |
| Relative vapour density                | not available  |             |
| Particle characteristics               | not applicable |             |

### 9.2. Other information

**9.2.1. Information with regard to physical hazard classes**

Information not available

**9.2.2. Other safety characteristics**

|                        |                |
|------------------------|----------------|
| Viscosita a 40°C       | 96,3 cSt       |
| Viscosità a 100°C      | 15,8 cSt       |
| Punto di scorrimento   | -42°C          |
| Consistenza            | Non pertinente |
| Punto di gocciolamento | Non pertinente |

**SECTION 10. Stability and reactivity****10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

**10.2. Chemical stability**

The product is stable in normal conditions of use and storage.

**10.3. Possibility of hazardous reactions**

No hazardous reactions are foreseeable in normal conditions of use and storage.

**10.4. Conditions to avoid**

None in particular. However the usual precautions used for chemical products should be respected.

**10.5. Incompatible materials**

Information not available

**10.6. Hazardous decomposition products**

Information not available

**SECTION 11. Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Metabolism, toxicokinetics, mechanism of action and other information





MAROIL S.R.L.

Revision nr. 16

Dated 12/12/2023

Printed on 12/12/2023

Page n. 9/16

Replaced revision:15 (Printed on: 10/11/2022)

**T&D Synthetic Oil 75W-90**

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

|                                  |   |
|----------------------------------|---|
| ATE (Inhalation) of the mixture: | Not classified (no significant component) |
| ATE (Oral) of the mixture:       | >2000 mg/kg                               |
| ATE (Dermal) of the mixture:     | Not classified (no significant component) |

distillates (petroleum), hydrotreated heavy paraffinic

|                                  |  |
|----------------------------------|--|
| LD50 (Dermal):                   | > 5000 mg/kg Coniglio - OECD Guideline 402 |
| LD50 (Oral):                     | > 5000 mg/kg Ratto - OECD Guideline 401    |
| LC50 (Inhalation mists/powders): | > 5 mg/l/4h Rat - OECD Guideline 403       |

distillates (petroleum), solvent-dewaxed heavy paraffinic

|                                  |  |
|----------------------------------|--|
| LD50 (Dermal):                   | > 5000 mg/kg Coniglio - OECD Guideline 402 |
| LD50 (Oral):                     | > 5000 mg/kg Ratto - OECD Guideline 401    |
| LC50 (Inhalation mists/powders): | > 5 mg/l/4h Rat - OECD Guideline 403       |

distillates (petroleum) solvent-dewaxed light paraffinic

|                                  |   |
|----------------------------------|---|
| LD50 (Dermal):                   | > 5000 mg/kg OECD Guideline 402 - Ratto |
| LD50 (Oral):                     | > 5000 mg/kg OECD Guideline 401 - Ratto |
| LC50 (Inhalation mists/powders): | > 5,53 mg/l/4h Rat - OECD Guideline 403 |

Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentoxide, and salted by amines, C12-14- tert-alkyl

|              |  |
|--------------|--|
| LD50 (Oral): | 2000 mg/kg Equivalente o similare OECD Guideline 401 - Ratto |
|--------------|--|

Magnesium metaborate

|                |   |
|----------------|---|
| LD50 (Dermal): | > 2000 mg/kg ratto - OECD Guideline 420 |
|----------------|---|



MAROIL S.R.L.

Revision nr. 16

Dated 12/12/2023

T&D Synthetic Oil 75W-90

Printed on 12/12/2023

Page n. 10/16

Replaced revision:15 (Printed on: 10/11/2022)

LD50 (Oral): > 2000 mg/kg ratto - OECD Guideline 420

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.

Contains:

Magnesium metaborate

Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentoxide, and salted by amines, C12-14- tert-alkyl

Polysulfides, di-tert-Bu

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

**T&D Synthetic Oil 75W-90**

Does not meet the classification criteria for this hazard class

**ASPIRATION HAZARD**

Does not meet the classification criteria for this hazard class Viscosity: 96 cSt

**11.2. Information on other hazards**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

**SECTION 12. Ecological information**

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

**12.1. Toxicity**

## Mineral oil

|                                   |  |
|-----------------------------------|--|
| LC50 - for Fish                   | > 100 mg/l/96h Pimephales promelas                   |
| EC50 - for Crustacea              | > 10000 mg/l/48h Dafnia                              |
| EC50 - for Algae / Aquatic Plants | > 100 mg/l/72h Alghe verdi (Scenedesmus quadricauda) |
| Chronic NOEC for Crustacea        | > 10 mg/l/21d Dafnia                                 |

## Polysulfides, di-tert-Bu

|                                   |                     |
|-----------------------------------|---------------------|
| EC50 - for Crustacea              | 63 mg/l/48h Dafnia  |
| EC50 - for Algae / Aquatic Plants | > 100 mg/l/72h Alga |

Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14- tert-alkyl

|   |  |
|---|--|
| LC50 - for Fish                         | 24 mg/l/96h Trota arcobaleno                               |
| EC50 - for Crustacea                    | 91,4 mg/l/48h Dafnia                                       |
| EC50 - for Algae / Aquatic Plants       | 6,4 mg/l/96h Selenastrum capricomutum - OECD Guideline 201 |
| Chronic NOEC for Crustacea              | 0,12 mg/l/21d Dafnia                                       |
| Chronic NOEC for Algae / Aquatic Plants | 1,7 mg/l/96h Selenastrum capricomutum - OECD Guideline 201 |

## Magnesium metaborate

|                       |  |
|-----------------------|--|
| Chronic NOEC for Fish | 50 mg/l Oncorhynchus mykiss - OECD Guideline 203 |
|-----------------------|--|

distillates (petroleum), hydrotreated heavy paraffinic

|                            |  |
|----------------------------|--|
| EC50 - for Crustacea       | > 10000 mg/l/48h Daphnia magna - Equivalente o similare a OECD Guideline 202 |
| Chronic NOEC for Crustacea | 10 mg/l/21d Daphnia magna - Equivalente o similare a OECD Guideline 211      |



distillates (petroleum), solvent-dewaxed  
heavy paraffinic  
EC50 - for Crustacea

> 10000 mg/l/48h Daphnia magna - Equivalente o similare a OECD Guideline  
202

Chronic NOEC for Crustacea

10 mg/l/21d Daphnia magna - Equivalente o similare a OECD Guideline 211

distillates (petroleum) solvent-dewaxed light  
paraffinic  
EC50 - for Crustacea

> 10000 mg/l/48h Daphnia magna - Equivalente o similare a OECD Guideline  
202

Chronic NOEC for Crustacea

10 mg/l/21d Daphnia magna - Equivalente o similare a OECD Guideline 211

**12.2. Persistence and degradability**

Mineral oil

NOT rapidly degradable

OECD TG 301 B, 31 %, 28 d, Non facilmente degradabile.

Polysulfides, di-tert-Bu

NOT rapidly degradable

OECD TG 301 B, 13 %, 28 d

Reaction products of 4-methyl-2-pentanol  
and diphosphorus pentasulfide, propoxylated,  
esterified with diphosphorus pentoxide, and  
salted by amines, C12-14- tert-alkyl

NOT rapidly degradable

OECD TG 301 B, 7,4 %, 28 d

Magnesium metaborate

Degradability: information not available

distillates (petroleum), hydrotreated heavy  
paraffinic

Entirely degradable

OECD Guideline 301 F

distillates (petroleum), solvent-dewaxed  
heavy paraffinic

Entirely degradable

OECD Guideline 301 F

distillates (petroleum) solvent-dewaxed light  
paraffinic

Entirely degradable

OECD Guideline 301 F

**12.3. Bioaccumulative potential**

Polysulfides, di-tert-Bu

Partition coefficient: n-octanol/water

6 Log Kow Misurato

**12.4. Mobility in soil**

Information not available



MAROIL S.R.L.

Revision nr. 16

Dated 12/12/2023

T&D Synthetic Oil 75W-90

Printed on 12/12/2023

Page n. 13/16

Replaced revision:15 (Printed on: 10/11/2022)

#### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

#### 12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

#### 12.7. Other adverse effects

Information not available

### SECTION 13. Disposal considerations

#### 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

#### CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

### SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

#### 14.1. UN number or ID number

not applicable

#### 14.2. UN proper shipping name

not applicable

#### 14.3. Transport hazard class(es)

not applicable

#### 14.4. Packing group



MAROIL S.R.L.

Revision nr. 16

Dated 12/12/2023

T&D Synthetic Oil 75W-90

Printed on 12/12/2023

Page n. 14/16

Replaced revision:15 (Printed on: 10/11/2022)

not applicable

#### 14.5. Environmental hazards

not applicable

#### 14.6. Special precautions for user

not applicable

#### 14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

## SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 3

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:



MAROIL S.R.L.

Revision nr. 16

Dated 12/12/2023

Printed on 12/12/2023

Page n. 15/16

Replaced revision:15 (Printed on: 10/11/2022)

## T&D Synthetic Oil 75W-90

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Information not available

### 15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

## SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

|                          |  |
|--------------------------|--|
| <b>Acute Tox. 4</b>      | Acute toxicity, category 4   |
| <b>Asp. Tox. 1</b>       | Aspiration hazard, category 1                                      |
| <b>Eye Irrit. 2</b>      | Eye irritation, category 2   |
| <b>Skin Sens. 1B</b>     | Skin sensitization, category 1B                                    |
| <b>Aquatic Chronic 2</b> | Hazardous to the aquatic environment, chronic toxicity, category 2 |
| <b>Aquatic Chronic 3</b> | Hazardous to the aquatic environment, chronic toxicity, category 3 |
| <b>H302</b>              | Harmful if swallowed.  |
| <b>H304</b>              | May be fatal if swallowed and enters airways.                      |
| <b>H319</b>              | Causes serious eye irritation.                                     |
| <b>H317</b>              | May cause an allergic skin reaction.                               |
| <b>H411</b>              | Toxic to aquatic life with long lasting effects.                   |
| <b>H412</b>              | Harmful to aquatic life with long lasting effects.                 |

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration



**MAROIL S.R.L.**

Revision nr. 16

Dated 12/12/2023

**T&D Synthetic Oil 75W-90**

Printed on 12/12/2023

Page n. 16/16

Replaced revision:15 (Printed on: 10/11/2022)

- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

#### GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
  2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
  3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
  4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
  5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
  6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
  7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
  8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
  9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
  10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
  11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
  12. Regulation (EU) 2016/1179 (IX Atp. CLP)
  13. Regulation (EU) 2017/776 (X Atp. CLP)
  14. Regulation (EU) 2018/669 (XI Atp. CLP)
  15. Regulation (EU) 2019/521 (XII Atp. CLP)
  16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
  17. Regulation (EU) 2019/1148
  18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
  19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
  20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
  21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
  22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - IFA GESTIS website
  - ECHA website
  - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

#### Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

#### CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

#### Changes to previous review:

The following sections were modified:

03 / 08 / 11 / 12.