



TotalEnergies

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by
Commission Regulation (EU) 2020/878

RUBIA TIR 7400 15W40

SDS # : 082680

previous revision date : 2022/02/23

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



1.1 Product identifier

Product name : RUBIA TIR 7400 15W40

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

| Identified uses |
|-----------------|
| Motor oil |

1.3 Details of the supplier of the safety data sheet

 TotalEnergies Lubrifiants
562 Avenue du Parc de L'île
92029 Nanterre Cedex FRANCE
Tél: +33 (0)1 41 35 40 00
Fax: +33 (0)1 41 35 84 71
 m.msds-lubs@totalenergies.com

TotalEnergies Marketing Romania SA
Str. Stejarilor, nr. 2, Cristian,
Brasov, 507055
Tel: 00 40 268 40 17 11
Fax: 00 40 268 40 17 26
fds-romania@totalenergies.com

Contact

H.S.E

1.4 Emergency telephone number

National advisory body/Poison Center

Telephone number : Romania
Emergency Clinical Hospital Bucharest (non-stop, 24 h/7d): 021 5992300, int. 182, 444, 213, 455
Other bodies responsible for receiving health information:
Targu Mures County Emergency Clinical Hospital Direct phone: 0265 210 110
Central Telephone (non-stop, 24 h/7z): 0372 653 100; 0372 683 700; 0265 212 111
Other institutions (child poisoning): Grigore Alexandrescu Children's Hospital,
Bucharest TOXAPEL Telephone (24h/24h): 021 2106282; 021 2106183
Moldavia
Serviciul Național Unic Pentru Apelurile de Urgență: 112

Supplier

Telephone number : Emergency phone: +44 1235 239670

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

Product definition : Mixture

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

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label elements : Contains Alkyl (C18-C28) toluenesulfonic acid, calcium salts, borated and Calcium long chain alkaryl sulfonate. May produce an allergic reaction.
Safety data sheet available on request.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB in a concentration $\geq 0,1$ %.

This product does not contain any substance present at a concentration equal to or greater than 0.1% by mass, included in the list drawn up in accordance with article 59, paragraph 1 of the REACH Regulation, due to its endocrine disrupting properties, or a substance known to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation 2018/605.

Other hazards which do not result in classification : Hazard of slipping on spilled product.

SECTION 3: Composition/information on ingredients**3.2 Mixtures** : Mixture

| Product/substance | Identifiers | % (w/w) | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|---|--|-----------|---------------------------------------|---|---------|
| <input checked="" type="checkbox"/> Distillates (petroleum), solvent-refined heavy paraffinic | REACH #: 01-2119488706-23 EC: 265-090-8 CAS: 64741-88-4 | ≤ 10 | Asp. Tox. 1, H304 | - | [1] [2] |
| Distillates (petroleum), hydrotreated heavy paraffinic | EC: 265-157-1 CAS: 64742-54-7 | ≤ 3 | Aquatic Chronic 4, H413 | - | [1] [2] |
| Alkyl (C18-C28) toluenesulfonic acid, | EC: 953-650-0 | ≤ 3 | Skin Sens. 1B, H317 Repr. 2, H361d | Repr. 2, H361d: C $\geq 17.15\%$ | [1] |



| | | | | | |
|--|--|------|--|---|-----|
| calcium salts, borated | | | | | |
| Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts | REACH #: 01-2119657973-23 EC: 272-238-5 CAS: 68784-31-6 | <2.5 | Eye Dam. 1, H318 Aquatic Chronic 2, H411 | - | [1] |
| Calcium long chain alkaryl sulfonate | EC: 682-816-2 CAS: 722503-68-6 | ≤1 | Skin Sens. 1B, H317 See Section 16 for the full text of the H statements declared above. | - | [1] |

Additional information : Mineral oil of petroleum origin. Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
dryness
cracking
- Ingestion** : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.



SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous combustion products : carbon monoxide
carbon dioxide
phosphorus oxides
sulfur oxides
Hydrogen sulfide
Mercaptans
Zinc oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.



6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Not available.
Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

| Product/substance | Exposure limit values |
|---|---|
| Distillates (petroleum), solvent-refined heavy paraffinic | HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2021). [Mineral oil, other than mineral oils that have previously been used in internal combustion engines to lubricate and cool moving parts of the engine] VLA: 5 mg/m ³ 8 hours. Short term: 10 mg/m ³ 15 minutes. |
| Distillates (petroleum), hydrotreated heavy paraffinic | HG 1218/2006, Annex 1, with subsequent modifications and additions (Romania, 3/2021). [Mineral oil, other than mineral oils that have previously been used in internal combustion engines to lubricate and cool moving parts of the engine] VLA: 5 mg/m ³ 8 hours. Short term: 10 mg/m ³ 15 minutes. |

Reportable hazardous constituent(s) contained in UVCB and/or multi-constituent substance(s) complying with the classification criteria and/or with an exposure limit (OEL)

No exposure limit value known.

Biological Limit Values (BLV)

No exposure indices known.



Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following:
 European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Advisory OEL : Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m³, NIOSH (REL) TWA 5 mg/m³, STEL 10 mg/m³, ACGIH (TLV) TWA 5 mg/m³ (highly refined)

DNELs/DMELs

| Product/substance | Type | Exposure | Value | Population | Effects |
|--|------|----------------------|------------------------|--------------------|----------|
| Distillates (petroleum), solvent-refined heavy paraffinic | DNEL | Long term Inhalation | 5.4 mg/m ³ | Workers | Local |
| | DNEL | Long term Inhalation | 1.2 mg/m ³ | General population | Local |
| | DNEL | Long term Oral | 0.74 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 0.97 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 1.19 mg/m ³ | General population | Local |
| | DNEL | Long term Inhalation | 2.73 mg/m ³ | Workers | Systemic |
| Distillates (petroleum), hydrotreated heavy paraffinic | DNEL | Long term Inhalation | 5.58 mg/m ³ | Workers | Local |
| | DNEL | Long term Inhalation | 2.73 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 5.58 mg/m ³ | Workers | Local |
| | DNEL | Long term Dermal | 970 µg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 1.19 mg/m ³ | General population | Local |
| | DNEL | Long term Oral | 740 µg/kg bw/day | General population | Systemic |
| Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts | DNEL | Long term Oral | 0.74 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 0.97 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 1.19 mg/m ³ | General population | Local |
| | DNEL | Long term Inhalation | 2.73 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 5.58 mg/m ³ | Workers | Local |
| | DNEL | Short term Oral | 29 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Oral | 0.21 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 2.1 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 2.93 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Dermal | 10.42 mg/kg bw/day | Workers | Systemic |



| | | | | | |
|--|------|-----------------------|-------------------------|--------------------|----------|
| | DNEL | Long term Inhalation | 11.75 mg/m ³ | General population | Systemic |
| | DNEL | Short term Dermal | 50 mg/kg bw/day | General population | Systemic |
| | DNEL | Short term Dermal | 100 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 198.6 mg/m ³ | General population | Systemic |
| | DNEL | Short term Inhalation | 496.4 mg/m ³ | Workers | Systemic |

PNECs

| Product/ingredient name | Compartment Detail | Name | Method Detail |
|--|------------------------|-------------------|---------------|
| Distillates (petroleum), hydrotreated heavy paraffinic Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts | Secondary Poisoning | 9.33 mg/kg | - |
| | Fresh water | 4 µg/l | - |
| | Marine water | 4.6 µg/l | - |
| | Marine water sediment | 0.00701 mg/kg dwt | - |
| | Soil | 0.0548 mg/kg dwt | - |
| | Sewage Treatment Plant | 3.8 mg/l | - |

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : In case of contact through splashing: safety glasses with side-shields, EN 166.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Hydrocarbon-proof gloves
nitrile rubber
Fluorinated rubber
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
In case of prolonged contact with the product, it is recommended to wear gloves complying with ISO 21420 and EN 374 standards, protecting at least for 480 minutes and having a thickness of 0,38 mm at least. These values are indicative only. The level of protection is provided by the material of the glove, its technical characteristics, its resistance to the chemicals to be handled, the appropriateness of its use and its replacement frequency

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Non-skid safety shoes or boots

Respiratory protection : None under normal use conditions. If these are not sufficient to maintain exposure below the OEL, suitable respiratory protection must be worn (Type A/P1).



Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature (20°C / 68°F) and pressure (1013 hPa) unless otherwise indicated

9.1 Information on basic physical and chemical properties

Appearance

| | |
|---|--|
| Physical state | : Liquid. [limpid] |
| Color | : Brown. |
| Odor | : Characteristic. |
| pH | : Not applicable. ▶ Product is non-soluble (in water). |
| Melting point/freezing point | : ▶ Technically not possible to measure |
| Initial boiling point and boiling range | : ▶ 316°C [EN ISO 3405] |
| Flash point | : ▶ Open cup: 241°C [ASTM D 92] |
| Flammability | : ▶ Not applicable. |
| Lower and upper explosion limit | : ▶ Lower: 0.9% Upper: 7% |
| Vapor pressure | : ▶ 0.013 kPa [room temperature] Not applicable. [50°C] |
| Vapor density | : Not available. |
| Relative density | : 0.888 [ASTM D 1298] |
| Density | : 0.888 g/cm ³ [15°C] [ASTM D 1298] |
| Solubility(ies) | : |

| Media | Result |
|---|-------------|
| ▶ Water | Not soluble |

| | |
|---|--|
| Miscible with water | : No. |
| Partition coefficient: n-octanol/ water | : Not applicable. |
| Auto-ignition temperature | : ▶ 250°C [ASTM E 659] |
| Decomposition temperature | : ▶ Not applicable. |
| Viscosity | : Kinematic (40°C): 98.7 mm ² /s [ASTM D 445] |

Particle characteristics

Median particle size : Not applicable.

9.2 Other information

No other relevant physical and chemical parameters for the safe use of the product

**SECTION 10: Stability and reactivity**

- 10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability** : Stable under recommended storage and handling conditions (see Section 7).
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.
- 10.5 Incompatible materials** : Strong oxidizing agents
- 10.6 Hazardous decomposition products** : Carbon monoxide
Carbon dioxide
Phosphorus oxides
Sulfur oxides
Hydrogen sulfide
Mercaptans
Zinc oxides

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

| Product/substance | Result | Species | Dose | Exposure | Test |
|--|---------------------------------|---------|-------------|----------|---|
| Distillates (petroleum), solvent-refined heavy paraffinic | LC50 Inhalation Dusts and mists | Rat | 5.1 mg/l | 4 hours | OECD 403 |
| | LD50 Dermal | Rabbit | >5000 mg/kg | - | OECD 402 |
| | LD50 Oral | Rat | >5000 mg/kg | - | OECD 420 |
| Distillates (petroleum), hydrotreated heavy paraffinic | LC50 Inhalation Dusts and mists | Rat | 5.53 mg/l | 4 hours | OECD 403 Acute Inhalation Toxicity |
| | LD50 Dermal | Rabbit | >5000 mg/kg | - | OECD 402 Acute Dermal Toxicity |
| | LD50 Oral | Rat | >5000 mg/kg | - | OECD 401 Acute Oral Toxicity |
| Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts | LD50 Dermal | Rabbit | >5000 mg/kg | - | OECD 402 Acute Dermal Toxicity |
| | LD50 Oral | Rat | 3.4 g/kg | - | OECD 401 Acute Oral Toxicity |
| Calcium long chain alkaryl sulfonate | LC50 Inhalation Dusts and mists | Rat | 5.1 mg/l | 4 hours | - |
| | LC50 Inhalation Vapor | Rat | 80.4 mg/l | 1 hours | - |
| | LC50 Inhalation Vapor | Rat | 20.1 mg/l | 4 hours | - |

**Acute toxicity estimates**

| Product/substance | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|--|--------------|----------------|--------------------------|----------------------------|-------------------------------------|
| Distillates (petroleum), solvent-refined heavy paraffinic | N/A | N/A | N/A | N/A | 5.1 |
| Distillates (petroleum), hydrotreated heavy paraffinic | N/A | N/A | N/A | N/A | 5.53 |
| Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts | 3400 | N/A | N/A | N/A | N/A |
| Calcium long chain alkaryl sulfonate | N/A | N/A | N/A | 20.1 | 5.1 |

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

| Product/substance | Result | Species | Score | Exposure | Test |
|--|------------------------|---------|-------|----------|---|
| Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts | Eyes - Irritant | Rabbit | - | - | OECD 405 |
| | Skin - Edema | Rabbit | 0.5 | 4 hours | OECD 404 Acute Dermal Irritation/ Corrosion |
| | Skin - Erythema/Eschar | Rabbit | 1.3 | 4 hours | OECD 404 |

Conclusion/Summary

Skin : Based on available data, the classification criteria are not met.

Eyes : Based on available data, the classification criteria are not met. The supplier of one or more of the components contained within this formulation has indicated that he has data on the components and/or similar mixtures, which confirms that at the concentration used, classification is not required

Respiratory : Based on available data, the classification criteria are not met.

Sensitization

| Product/substance | Route of exposure | Species | Result |
|--|-------------------|------------|-----------------|
| Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts | skin | Guinea pig | Not sensitizing |

Conclusion/Summary

Skin : Based on available data, the classification criteria are not met. The supplier of one or more of the components contained within this formulation has indicated that he has data on the components and/or similar mixtures, which confirms that at the concentration used, classification is not required Contains sensitizer May produce an allergic reaction.

Respiratory : Based on available data, the classification criteria are not met.

Mutagenicity



| Product/substance | Test | Experiment | Result |
|--|--|---|----------|
| Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts | OECD 471 | Experiment: In vitro Subject: Bacteria | Negative |
| | OECD 474 Mammalian Erythrocyte Micronucleus Test | Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic | Negative |

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Reproductive toxicity

| Product/substance | Maternal toxicity | Fertility | Development toxin | Species | Dose | Exposure |
|--|-------------------|-----------|-------------------|---------|----------------------|----------|
| Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts | - | Negative | Negative | Rat | Oral: 30 mg/kg NOAEL | - |

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure)

Conclusion/Summary : Based on available data, the classification criteria are not met.

Aspiration hazard

| Product/substance | Result |
|---|--------------------------------|
| Distillates (petroleum), solvent-refined heavy paraffinic | ASPIRATION HAZARD - Category 1 |

Conclusion/Summary : Based on available data, the classification criteria are not met.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : Defatting to the skin. May cause skin dryness and irritation.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking
Ingestion : No specific data.

**Delayed and immediate effects and also chronic effects from short and long term exposure****Short term exposure**

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

| Product/substance | Result | Species | Dose | Exposure |
|--|----------------------|---------|-----------|----------|
| Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts | Sub-acute NOAEL Oral | Rat | 125 mg/kg | - |

Conclusion/Summary : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards**11.2.1 Endocrine disrupting properties**

This product does not contain any substance present at a concentration equal to or greater than 0.1% by mass, included in the list drawn up in accordance with article 59, paragraph 1 of the REACH Regulation, due to its endocrine disrupting properties, or a substance known to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation 2018/605.

11.2.2 Other information

Not available.

SECTION 12: Ecological information**12.1 Toxicity**

| Product/substance | Result | Species | Exposure | Test |
|--|---|---|----------------------|----------|
| <input checked="" type="checkbox"/> Distillates (petroleum), solvent-refined heavy paraffinic | Acute EC50 >100 mg/l | Algae - <i>Pseudokirchnerella subcapitata</i> | 48 hours | OECD 201 |
| | Acute EC50 >10000 mg/l | Daphnia - <i>Daphnia magna</i> | 48 hours | OECD 202 |
| | Chronic NOEL 10 mg/l | Daphnia - <i>Daphnia magna</i> | 21 days | OECD 211 |
| | Chronic NOEL >1000 mg/l | Fish - <i>Oncorhynchus mykiss</i> | 21 days | - |
| Distillates (petroleum), hydrotreated heavy paraffinic Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts | Acute EC50 10000 mg/l | Daphnia - <i>Daphnia magna</i> | 48 hours | OECD 202 |
| | Acute EC50 240 mg/l | Algae - <i>Desmodesmus subspicatus</i> | 72 hours | - |
| | Acute EC50 75 mg/l Acute LC50 4.4 mg/l | Daphnia - <i>Daphnia magna</i> Fish | 48 hours 96 hours | - - |

Conclusion/Summary : Not available.

12.2 Persistence and degradability



Conclusion/Summary : Not available.

| Product/substance | Aquatic half-life | Photolysis | Biodegradability |
|--------------------------------------|-------------------|------------|------------------|
| Calcium long chain alkaryl sulfonate | - | - | Not readily |

12.3 Bioaccumulative potential

| Product/substance | LogK _{ow} | BCF | Potential |
|--|--------------------|-----|-----------|
| Distillates (petroleum), solvent-refined heavy paraffinic | 3.9 to 6 | - | High |
| Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts | 4 | - | High |

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

Mobility in soil : Given its physical and chemical characteristics, the product generally shows low soil mobility. The product is insoluble and floats on water. Loss by evaporation is limited.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB in a concentration $\geq 0,1\%$.

12.6 Endocrine disrupting properties

This product does not contain any substance present at a concentration equal to or greater than 0.1% by mass, included in the list drawn up in accordance with article 59, paragraph 1 of the REACH Regulation, due to its endocrine disrupting properties, or a substance known to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation 2018/605.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used. The following Waste Codes are only suggestions: 13 02 05*

Packaging



Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | ICAO/IATA |
|--|----------------|----------------|----------------|----------------|
| 14.1 UN number or ID number | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| 14.2 UN proper shipping name | - | - | - | - |
| 14.3 Transport hazard class(es) | - | - | - | - |
| 14.4 Packing group | - | - | - | - |
| 14.5 Environmental hazards | No. | No. | No. | No. |

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed



Explosive precursors : Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

National regulatory information

GD 398/2010 on establishing measures for application of Regulation (EC) no. 1.272 / 2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548 / EEC and 1999/45 / EC, and amending Regulation (EC). 1.907 / 2006GD 477/2009 on establishing penalties for infringements of the provisions of Regulation (EC) no. 1.907 / 2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Agency for Chemicals, amending Directive 1999/45 / EC and repealing Regulation (EEC) No . 793/93 and Regulation (EC) no. 1,488 / 94 Commission and Council Directive 76/769 / EEC and Directives 91/155 / EEC, 93/67 / EEC, 93/105 / EC and 2000/21 / EC of the CommissionGD 1218/2006 laying down minimum requirements for safety and health at work for the protection of workers from risks related to chemical agents

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

LU - Luxembourg prohibited chemicals in the workplace

Not listed.

Inventory list

| | |
|------------------------------------|--|
| Australia inventory (AIIC) | : <input checked="" type="checkbox"/> All components are listed or exempted. |
| Canada inventory (DSL/NDSL) | : <input checked="" type="checkbox"/> All components are listed or exempted. |
| China inventory (IECSC) | : All components are listed, exempted, or notified. |
| Europe inventory (EC) | : <input checked="" type="checkbox"/> All components are listed or exempted. |



| | |
|---|---|
| Japan inventory | : <input checked="" type="checkbox"/> Japan inventory (CSCL): All components are listed or exempted. Japan inventory (ISHL): Not determined. |
| New Zealand Inventory of Chemicals (NZIoC) | : <input checked="" type="checkbox"/> All components are listed or exempted. |
| Philippines inventory (PICCS) | : <input checked="" type="checkbox"/> All components are listed or exempted. |
| Korea inventory (KECI) | : <input checked="" type="checkbox"/> All components are listed or exempted. |
| Taiwan Chemical Substances Inventory (TCSI) | : <input checked="" type="checkbox"/> All components are listed or exempted. |
| Thailand inventory | : Not determined. |
| Turkey inventory | : Not determined. |
| United States inventory (TSCA 8b) | : <input checked="" type="checkbox"/> All components are listed or exempted. |
| Vietnam inventory | : Not determined. |

The information stated in this section relates solely to the conformity of the chemical product with the countries Inventories. The information used to confirm the inventory status of this product may be based on additional data to the chemical composition shown in Section 3. Other regulations may apply for importation or marketing authorizations.

15.2 Chemical Safety Assessment : Risk management measures and safety conditions of use are included in the relevant sections of the SDS

SECTION 16: Other information

Indicates information that has changed from previously issued version.

| | |
|-----------------------------------|--|
| Abbreviations and acronyms | : ACGIH = American Conference of Governmental Industrial Hygienists ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DNEL = Derived No Effect Level DMEL = Derived Minimal Effect Level EL50 = median Effective Loading EUH statement = CLP-specific Hazard statement LC50 = Median lethal concentration LD50 = Median lethal dose N/A = Not available NIOSH = National Institute of Occupational Safety and Health NOAEL = No Observed Adverse Effect Level NOEC = No Observed Effect Concentration OEL = Occupational Exposure Limit PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration QSAR = Quantitative Structure–Activity Relationship REL = Recommended Exposure Limit STEL = Short Term Exposure Limit TLV = Threshold Limit Value VOC = Volatile Organic Compound vPvB = Very Persistent and Very Bioaccumulative Unique Formula Identifier (UFI) UVCB Substance of unknown or Variable composition, Complex reaction products or Biological material |
|-----------------------------------|--|

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification | Justification |
|-----------------|---------------|
| Not classified. | |

Full text of abbreviated H statements



| | |
|---|---|
| H304 H317 H318 H361d H411 H413 | May be fatal if swallowed and enters airways. May cause an allergic skin reaction. Causes serious eye damage. Suspected of damaging the unborn child. Toxic to aquatic life with long lasting effects. May cause long lasting harmful effects to aquatic life. |
|---|---|

Full text of classifications [CLP/GHS]

| | |
|---|---|
| Aquatic Chronic 2 Aquatic Chronic 4 Asp. Tox. 1 Eye Dam. 1 Repr. 2 Skin Sens. 1B | AQUATIC HAZARD (LONG-TERM) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 4 ASPIRATION HAZARD - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 TOXIC TO REPRODUCTION - Category 2 SKIN SENSITIZATION - Category 1B |
|---|---|

Date of revision : 2023/10/20

previous revision date : 2022/02/23

Version : 2

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.