

SAFETY DATA SHEET

Q8 T 45 LS 85W-140



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

1.1 Product identifier

Product name : Q8 T 45 LS 85W-140
Viscosity or Type : SAE 85W-140

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

Material uses : Lubricating oil for automotive transmissions

1.3 Details of the supplier of the safety data sheet

Manufacturer / Distributor : Q8 Danmark A/S
Arne Jacobsens Allé 7
2300 København S,
Danmark
Tel. 7012 4545, Fax 4599 2020
Email: produktteknik@Q8.dk, Web: www.Q8.dk

e-mail address of person responsible for this SDS : SDSinfo@Q8.com, communication preferably in English only.

1.4 Emergency telephone number

Denmark : +45 8988 2286
Europe : +44 (0) 1235 239 670
Global (English only) : +44 (0) 1865 407 333



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]

AQUATIC HAZARD (LONG-TERM) Category 2 H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Ingredients of unknown toxicity : None.

Ingredients of unknown ecotoxicity : None.

See Section 16 for the full text of the H statements declared above.

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

2.2 Label elements

Hazard pictograms :



Signal word : No signal word.

Hazard statements : H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

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SECTION 2: Hazards identification

- Prevention** : P273 - Avoid release to the environment.
- Response** : P391 - Collect spillage.
- Storage** : Not applicable.
- Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazardous ingredients** : (Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines
- Supplemental label elements** : Contains Amines, C12-14-tert-alkyl and Reaction products of bis(4-methylpentan-2-yl)dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched). May produce an allergic reaction.
- Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Restricted to professional users.
- Special packaging requirements**
- Containers to be fitted with child-resistant fastenings** : Not applicable.
- Tactile warning of danger** : Not applicable.

2.3 Other hazards

- Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
- Other hazards which do not result in classification** : Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Regulation (EC) No. 1272/2008 [CLP] | Type | Notes |
|---|---|-----------|---|---------|-------|
| Residual oils (petroleum,) solvent-refined | EC: 265-101-6 CAS: 64742-01-4 Index: 649-459-00-4 | ≥75 - ≤90 | Not classified. | [2] | L |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | EC: 265-169-7 CAS: 64742-65-0 | ≤10 | Not classified. | [2] | L |
| Distillates (petroleum), hydrotreated heavy paraffinic | REACH #: 01-2119484627-25 EC: 265-157-1 CAS: 64742-54-7 Index: 649-467-00-8 | ≤3 | Not classified. | [2] | L |
| Distillates (petroleum), hydrotreated middle | REACH #: 01-2119489867-12 EC: 265-148-2 CAS: 64742-46-7 Index: 649-221-00-X | ≤3 | Asp. Tox. 1, H304 | [1] [2] | H-N |
| Distillates (petroleum), hydrotreated light paraffinic | REACH #: 01-2119487077-29 EC: 265-158-7 CAS: 64742-55-8 | ≤3 | Asp. Tox. 1, H304 | [1] [2] | H-L |
| Amines, C12-14-tert-alkyl | REACH #: 01-2119456798-18 EC: 273-279-1 CAS: 68955-53-3 | <1 | Acute Tox. 4, H302 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1B, H314 | [1] | - |

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SECTION 3: Composition/information on ingredients

| | | | | | |
|---|---|---------------------------|---|-----------------------|-------------------|
| <p>Reaction products of bis (4-methylpentan-2-yl) dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) (Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines</p> | <p>REACH #: 01-2119493620-38 EC: 931-384-6</p> <p>REACH #: 01-2119473797-19 CAS: 1213789-63-9</p> | <p><1</p> <p><1</p> | <p>Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) Acute Tox. 4, H302 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 2, H411</p> <p>Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)</p> <p>See Section 16 for the full text of the H statements declared above.</p> | <p>[1]</p> <p>[1]</p> | <p>-</p> <p>-</p> |
|---|---|---------------------------|---|-----------------------|-------------------|

The mineral oils in the product contain < 3% DMSO extract (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
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

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. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- 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. Wash clothing before reuse. Clean shoes thoroughly before reuse.

SECTION 4: First aid measures

- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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, alcohol-resistant foam or water spray (fog).
- 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. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
sulfur 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilled product.

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

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- 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.

Seveso Directive - Reporting thresholds

Danger criteria

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SECTION 7: Handling and storage

| Category | Notification and MAPP threshold | Safety report threshold |
|----------|---------------------------------|-------------------------|
| E2 | 200 tonne | 500 tonne |

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|---|---|
| Residual oils (petroleum,) solvent-refined | Working Environment Authority (Denmark, 5/2018). TWA: 1 mg/m ³ 8 hours. Form: mist and particles |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | Working Environment Authority (Denmark, 5/2018). TWA: 1 mg/m ³ 8 hours. Form: mist and particles |
| Distillates (petroleum), hydrotreated heavy paraffinic | Working Environment Authority (Denmark, 5/2018). TWA: 1 mg/m ³ 8 hours. Form: mist and particles |
| Distillates (petroleum), hydrotreated middle | Working Environment Authority (Denmark, 5/2018). TWA: 1 mg/m ³ 8 hours. Form: mist and particles |
| Distillates (petroleum), hydrotreated light paraffinic | Working Environment Authority (Denmark, 5/2018). TWA: 1 mg/m ³ 8 hours. Form: mist and particles |

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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.

DNELs/DMELs

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|--|------|----------------------|------------------------|--------------------|----------|
| Amines, C12-14-tert-alkyl | DNEL | Long term Oral | 0.35 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 1.2 mg/m ³ | General population | Local |
| | DNEL | Long term Inhalation | 2.5 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 12.1 mg/m ³ | Workers | Local |
| | DNEL | Long term Inhalation | 12.5 mg/m ³ | Workers | Systemic |
| (Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines | DNEL | Long term Oral | 40 µg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 0.09 mg/kg bw/day | Workers | Systemic |

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SECTION 8: Exposure controls/personal protection

| | | | | | |
|--|------|----------------------|------------------------|---------|----------|
| | DNEL | Long term Inhalation | 0.38 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Dermal | 0.06 % | Workers | Local |

PNECs

No PNECs available.

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 : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Wear suitable gloves tested to EN374. Recommended: < 1 hour (breakthrough time): nitrile rubber 0.17 mm.

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.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: Boiling point > 65 °C: A1; Boiling point < 65 °C: AX1; Hot material: A1P2.

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

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. [Oily liquid.]

Appearance : Clear.

Color : Yellow

Odor : Characteristic.

Odor threshold : Not available.

pH : 7

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| | |
|---|---|
| Melting point/freezing point | : -21°C |
| Initial boiling point and boiling range | : >300°C |
| Flash point | : Open cup: >190°C [ASTM D92.] |
| Evaporation rate | : Not available. |
| Flammability (solid, gas) | : Not applicable. |
| Upper/lower flammability or explosive limits | : Not available. |
| Vapor pressure | : <0.01 kPa [room temperature] |
| Vapor density | : Not available. |
| Density | : 0.91 g/cm ³ [15°C] |
| Solubility(ies) | : Insoluble in the following materials: cold water and hot water. |
| Partition coefficient: n-octanol/ water | : Not available. |
| Auto-ignition temperature | : >300°C |
| Decomposition temperature | : >300°C |
| Viscosity (40°C) | : 376 cSt |
| Viscosity (100°C) | : 27.1 cSt |
| Explosive properties | : Not applicable. |
| Oxidizing properties | : Not applicable. |

9.2 Other information

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 | : The product is stable. |
| 10.3 Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| 10.4 Conditions to avoid | : No specific data. |
| 10.5 Incompatible materials | : Reactive or incompatible with the following materials: Strong oxidizing materials |
| 10.6 Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---------------------------------|--------------------|------------------------|----------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | LC50 Inhalation Dusts and mists | Rat - Male, Female | 5.53 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | >5000 mg/kg | - |
| | LD50 Oral | Rat | >5000 mg/kg | - |
| Distillates (petroleum), hydrotreated middle | LD50 Dermal | Rabbit | >2000 mg/kg | - |
| | LD50 Oral | Rat | >15 g/kg | - |
| Distillates (petroleum), hydrotreated light paraffinic | LC50 Inhalation Dusts and mists | Rat | 3900 mg/m ³ | 4 hours |

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SECTION 11: Toxicological information

| | | | | |
|---------------------------|-----------------------|-----------------------|-------------|---------|
| Amines, C12-14-tert-alkyl | LD50 Dermal | Rabbit - Male, Female | >5000 mg/kg | - |
| | LD50 Oral | Rat - Male, Female | >5000 mg/kg | - |
| | LC50 Inhalation Gas. | Rat | 157 ppm | 4 hours |
| | LC50 Inhalation Vapor | Rat | 1.19 mg/l | 4 hours |
| | LD50 Dermal | Rabbit | 1120 mg/kg | - |
| | LD50 Dermal | Rat | 251 mg/kg | - |
| | LD50 Oral | Rat | 300 mg/kg | - |

Conclusion/Summary : Not available.

Acute toxicity estimates

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|--|--------------|----------------|--------------------------|----------------------------|-------------------------------------|
| Q8 T 45 LS 85W-140 | N/A | 36695.9 | N/A | 174 | N/A |
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | N/A | N/A | N/A | N/A | 5.53 |
| Amines, C12-14-tert-alkyl | 500 | 251 | N/A | 1.19 | N/A |
| Reaction products of bis(4-methylpentan-2-yl) dithiophosphoric acid with phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched) | 500 | N/A | N/A | N/A | N/A |
| (Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines | 500 | N/A | N/A | N/A | N/A |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|------------------------------------|---------|-------|----------|-------------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | Skin - Erythema/Eschar | Rabbit | 0.17 | 72 hours | 7 days |
| | Skin - Edema | Rabbit | 0 | 72 hours | 7 days |
| | Eyes - Iris lesion | Rabbit | 0 | 48 hours | 72 hours |
| | Eyes - Redness of the conjunctivae | Rabbit | 0.33 | 48 hours | 72 hours |
| Distillates (petroleum), hydrotreated light paraffinic | Skin - Erythema/Eschar | Rabbit | 0.17 | 72 hours | 7 days |
| | Skin - Edema | Rabbit | 0 | 72 hours | 7 days |
| | Eyes - Iris lesion | Rabbit | 0 | 48 hours | 72 hours |
| | Eyes - Redness of the conjunctivae | Rabbit | 0.33 | 48 hours | 72 hours |
| Amines, C12-14-tert-alkyl | Eyes - Severe irritant | Rabbit | - | 0.1 MI | - |
| | Skin - Severe irritant | Rabbit | - | 0.5 MI | - |

Conclusion/Summary : Not available.

Sensitization

| Product/ingredient name | Route of exposure | Species | Result |
|---|-------------------|------------|-----------------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | skin | Guinea pig | Not sensitizing |
| Distillates (petroleum), hydrotreated light paraffinic | skin | Guinea pig | Not sensitizing |

Conclusion/Summary : Not available.

Mutagenicity

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SECTION 11: Toxicological information

| Product/ingredient name | Test | Experiment | Result |
|---|---|---|----------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | 474 Mammalian Erythrocyte Micronucleus Test | Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic | Negative |
| Distillates (petroleum), hydrotreated light paraffinic | 474 Mammalian Erythrocyte Micronucleus Test | Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic | Negative |

Conclusion/Summary : Not available.

Carcinogenicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|------------------------|----------------|------|----------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | Negative - Dermal - TC | Mouse - Female | - | 78 weeks |
| Distillates (petroleum), hydrotreated light paraffinic | Negative - Dermal - TC | Mouse - Female | - | 78 weeks |

Conclusion/Summary : Not available.

Reproductive toxicity

| Product/ingredient name | Maternal toxicity | Fertility | Developmental toxin | Species | Dose | Exposure |
|---|-------------------|-----------|---------------------|--------------------|---------------------|----------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | Negative | Negative | Negative | Rat - Male, Female | Oral: 1000 mg/kg | - |
| Distillates (petroleum), hydrotreated light paraffinic | Negative | Negative | Negative | Rat - Male, Female | Oral: 1000 mg/kg | - |

Conclusion/Summary : Not available.

Teratogenicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|-------------------|---------|------------|-----------------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | Negative - Dermal | Rat | 2000 mg/kg | 7 days per week |
| Distillates (petroleum), hydrotreated light paraffinic | Negative - Dermal | Rat | 2000 mg/kg | 7 days per week |

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|--|------------|-------------------|------------------------------|
| Amines, C12-14-tert-alkyl | Category 3 | - | Respiratory tract irritation |
| (Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines | Category 3 | - | Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|--|------------|-------------------|---------------|
| (Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines | Category 2 | - | - |

Aspiration hazard

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SECTION 11: Toxicological information

| Product/ingredient name | Result |
|--|--|
| Distillates (petroleum), hydrotreated middle Distillates (petroleum), hydrotreated light paraffinic (Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines | ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 |

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/ingredient name | Result | Species | Dose | Exposure |
|---|---|--------------------|------------------------|---------------------------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | Sub-chronic NOAEL Oral | Rat - Male, Female | ≥2000 mg/kg | 13 weeks; 5 days per week |
| | Sub-acute LOAEL Oral | Rat - Male | 125 mg/kg | 13 weeks; 5 hours per day |
| Distillates (petroleum), hydrotreated light paraffinic | Sub-acute NOAEL Inhalation Dusts and mists | Rat - Male | >980 mg/m ³ | 4 weeks; 5 days per week |
| | Sub-chronic NOAEL Oral | Rat - Male, Female | ≥2000 mg/kg | 13 weeks; 5 days per week |
| | Sub-acute LOAEL Oral | Rat - Male | 125 mg/kg | 13 weeks; 5 hours per day |
| | Sub-acute NOAEL Inhalation Dusts and mists | Rat - Male | >980 mg/m ³ | 4 weeks; 5 days per week |

Conclusion/Summary : Not available.
General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.

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SECTION 11: Toxicological information

- Teratogenicity** : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|-----------------------------------|----------------------------|----------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | Acute NEL >100 mg/l Fresh water | Algae | 72 hours |
| Distillates (petroleum), hydrotreated middle | Acute NEL >10000 mg/l Fresh water | Daphnia - Daphnia Magma | 48 hours |
| | Acute NEL ≥100 mg/l Fresh water | Fish - Pimephales promelas | 96 hours |
| | Chronic NEL 10 mg/l Fresh water | Daphnia - Daphnia magna | 21 days |
| | LC50 >100 mg/l | Fish | 96 hours |

Conclusion/Summary : Not available.

12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|--|------|----------------|------|----------|
| Distillates (petroleum), hydrotreated middle | - | 61 % - 28 days | - | - |

Conclusion/Summary : Not available.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|-------------------|------------|------------------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | - | - | Inherent |
| Distillates (petroleum), hydrotreated middle | - | - | Readily |
| Distillates (petroleum), hydrotreated light paraffinic | - | - | Inherent |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|---|--------------------|-----|-----------|
| Distillates (petroleum), solvent-dewaxed heavy paraffinic | >3 | - | low |
| Distillates (petroleum), hydrotreated light paraffinic | >3 | - | low |
| Amines, C12-14-tert-alkyl | 2.9 | - | low |

12.4 Mobility in soil

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

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.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

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.

European waste catalogue (EWC)

| Waste code | Waste designation |
|------------|---|
| 13 02 05* | mineral-based non-chlorinated engine, gear and lubricating oils |

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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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 | IATA |
|---------------------------------|----------------|----------------|----------------|----------------|
| 14.1 UN 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 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 :  Restricted to professional users.

Other EU regulations

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

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


Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

Seveso Directive

 This product is controlled under the Seveso Directive.

Danger criteria

| Category |
|---|
|  2 |

National regulations

Product registration number : PR-nr: 2100284

MAL-code :  6

Protection based on MAL : **According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:**

General: Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

In all spraying operations in which there is return spray, the following must be worn: respiratory protection and arm protectors/apron/coveralls/protective clothing as appropriate or as instructed.

SECTION 15: Regulatory information

MAL-code: 5-6

Application: When using scraper or knife, brush, roller etc. for pre- and post-treatments in a spray booth where the operator is outside the spray zone and when working in similar new* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When spraying in new* booths and cabins with non-atomizing guns.

- Protective clothing must be worn.

During non-atomizing spraying in existing* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When spraying in existing* spray booths, if the operator is outside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments in cabins or booths of the existing* facility type, if the operator is inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin. During downtimes, cleaning and repair of closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents.

- Air-supplied full mask and protective clothing must be worn.

When spraying in new* booths if the operator is outside the spray zone.

- Air-supplied full mask must be worn.

During all spraying where atomization occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.

- Air-supplied full mask, protective clothing and hood must be worn.

Drying: Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc. must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.

Polishing: When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.

Caution The regulations contain other stipulations in addition to the above.

*See Regulations.

Hazard class for water (WGK) : 

VOC content : Exempt.

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.

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SECTION 15: Regulatory information

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

| | |
|--------------------------|--|
| Australia | : <input checked="" type="checkbox"/> Not determined. |
| Canada | : <input checked="" type="checkbox"/> Not determined. |
| China | : <input checked="" type="checkbox"/> Not determined. |
| Europe | : <input checked="" type="checkbox"/> Not determined. |
| Japan | : <input checked="" type="checkbox"/> Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined. |
| New Zealand | : Not determined. |
| Philippines | : Not determined. |
| Republic of Korea | : <input checked="" type="checkbox"/> Not determined. |
| Taiwan | : Not determined. |
| Thailand | : Not determined. |
| Turkey | : Not determined. |
| United States | : <input checked="" type="checkbox"/> Not determined. |
| Viet Nam | : Not determined. |

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- SGG = Segregation Group
- vPvB = Very Persistent and Very Bioaccumulative

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

| Classification | Justification |
|---|--------------------|
| <input checked="" type="checkbox"/> Aquatic Chronic 2, H411 | Calculation method |

Full text of abbreviated H statements

| | |
|--|--|
| <input checked="" type="checkbox"/> H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H330 | Fatal if inhaled. |
| H335 | May cause respiratory irritation. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |

Full text of classifications [CLP/GHS]

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SECTION 16: Other information

| | |
|-------------------|---|
| Acute Tox. 2 | ACUTE TOXICITY - Category 2 |
| Acute Tox. 3 | ACUTE TOXICITY - Category 3 |
| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| Aquatic Acute 1 | AQUATIC HAZARD (ACUTE) - Category 1 |
| Aquatic Chronic 1 | AQUATIC HAZARD (LONG-TERM) - Category 1 |
| Aquatic Chronic 2 | AQUATIC HAZARD (LONG-TERM) - Category 2 |
| Asp. Tox. 1 | ASPIRATION HAZARD - Category 1 |
| Eye Dam. 1 | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 |
| Skin Corr. 1B | SKIN CORROSION/IRRITATION - Category 1B |
| Skin Sens. 1 | SKIN SENSITIZATION - Category 1 |
| STOT RE 2 | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3 |

Training advice : Ensure operatives are trained to minimise exposures.

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Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.