



## 4. First-aid measures

|   |  |
|---|--|
| <b>Inhalation</b>   | Move to fresh air. Call a physician if symptoms develop or persist.  |
| <b>Skin contact</b>   | Wash off with soap and water. Get medical attention if irritation develops and persists.                         |
| <b>Eye contact</b>  | Rinse with water. Get medical attention if irritation develops and persists.                                     |
| <b>Ingestion</b>  | Rinse mouth. Get medical attention if symptoms occur.  |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Direct contact with eyes may cause temporary irritation. Repeated exposure may cause skin dryness or cracking.   |
| <b>Indication of immediate medical attention and special treatment needed</b> | Treat symptomatically.   |
| <b>General information</b>  | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |

## 5. Fire-fighting measures

|  |  |
|--|--|
| <b>Suitable extinguishing media</b>                                  | Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).  |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.   |
| <b>Specific hazards arising from the chemical</b>                    | During fire, gases hazardous to health may be formed. Do not direct solid water stream or foam into hot, burning pools; this may cause frothing and increase fire intensity.   |
| <b>Special protective equipment and precautions for firefighters</b> | Self-contained breathing apparatus and full protective clothing must be worn in case of fire.  |
| <b>Fire fighting equipment/instructions</b>                          | Move containers from fire area if you can do so without risk. Cool containers exposed to flames with water until well after the fire is out. Do not point solid water stream directly into burning oil to avoid spreading. |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials.   |
| <b>General fire hazards</b>  | Will burn if involved in a fire.   |

## 6. Accidental release measures

|  |  |
|--|--|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.   |
| <b>Methods and materials for containment and cleaning up</b>               | Prevent product from entering drains.<br><br>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Clean contaminated area with oil-removing material.<br><br>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.<br><br>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. |
| <b>Environmental precautions</b>   | Avoid discharge into drains, water courses or onto the ground.   |

## 7. Handling and storage

|   |   |
|---|---|
| <b>Precautions for safe handling</b>                                | Avoid direct contact with eyes and prolonged skin exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. The handling temperature should not exceed 140°F/60°C. Observe good industrial hygiene practices. |
| <b>Conditions for safe storage, including any incompatibilities</b> | Store in original tightly closed container. Keep away from heat, sparks and open flame. Store away from incompatible materials (see Section 10 of the SDS).   |

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Product            | Type | Value               | Form  |
|--------------------|------|---------------------|-------|
| OIL MIST (MINERAL) | PEL  | 5 mg/m <sup>3</sup> | Mist. |

**US. ACGIH Threshold Limit Values**

| Product            | Type | Value   | Form                |
|--------------------|------|---------|---------------------|
| OIL MIST (MINERAL) | TWA  | 5 mg/m3 | Inhalable fraction. |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Product            | Type | Value    | Form  |
|--------------------|------|----------|-------|
| OIL MIST (MINERAL) | STEL | 10 mg/m3 | Mist. |
|                    | TWA  | 5 mg/m3  | Mist. |

|  |  |
|--|--|
| <b>Biological limit values</b>   | No biological exposure limits noted for the ingredient(s).   |
| <b>Appropriate engineering controls</b>                                      | Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide easy access to water supply and eye wash facilities. |
| <b>Individual protection measures, such as personal protective equipment</b> |  |
| <b>Eye/face protection</b>   | Wear safety glasses with side shields (or goggles).  |
| <b>Skin protection</b>   |  |
| <b>Hand protection</b>   | Wear appropriate chemical resistant gloves. Nitrile or neoprene gloves are recommended. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.   |
| <b>Skin protection</b>   |  |
| <b>Other</b>   | Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Protective clothing should be chemical/oil resistant.   |
| <b>Respiratory protection</b>  | If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Selection and use of respiratory protective equipment should be in accordance with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.                               |
| <b>Thermal hazards</b>   | Wear appropriate thermal protective clothing, when necessary.  |
| <b>General hygiene considerations</b>  | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.  |

**9. Physical and chemical properties****Appearance**

|   |                                       |
|---|---------------------------------------|
| <b>Physical state</b>                               | Liquid.                               |
| <b>Form</b>   | Clear liquid.                         |
| <b>Color</b>  | Blue.                                 |
| <b>Odor</b>   | Petroleum.                            |
| <b>Odor threshold</b>                               | Not available.                        |
| <b>pH</b>   | Not available.                        |
| <b>Melting point/freezing point</b>                 | Not available.                        |
| <b>Initial boiling point and boiling range</b>      | Not available.                        |
| <b>Flash point</b>                                  | 201.2 °F (94.0 °C) Cleveland Open Cup |
| <b>Evaporation rate</b>                             | Not available.                        |
| <b>Flammability (solid, gas)</b>                    | Not applicable.                       |
| <b>Upper/lower flammability or explosive limits</b> |                                       |
| <b>Explosive limit - lower (%)</b>                  | Not available.                        |
| <b>Explosive limit - upper (%)</b>                  | Not available.                        |
| <b>Vapor pressure</b>                               | Not available.                        |
| <b>Vapor density</b>                                | Not available.                        |
| <b>Relative density</b>                             | Not available.                        |
| <b>Solubility(ies)</b>                              |                                       |
| <b>Solubility (water)</b>                           | Negligible.                           |

|  |                                      |
|--|--------------------------------------|
| <b>Solubility (other)</b>                      | Miscible in most petroleum solvents. |
| <b>Partition coefficient (n-octanol/water)</b> | Not available.                       |
| <b>Auto-ignition temperature</b>               | Not available.                       |
| <b>Decomposition temperature</b>               | Not available.                       |
| <b>Viscosity</b>                               | 30.7 cSt                             |
| <b>Viscosity temperature</b>                   | 104 °F (40 °C)                       |
| <b>Other information</b>                       |                                      |
| <b>Explosive properties</b>                    | Not explosive.                       |
| <b>Oxidizing properties</b>                    | Not oxidizing.                       |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport.   |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.   |
| <b>Conditions to avoid</b>                | Contact with incompatible materials. Keep away from heat, sparks and open flame.  |
| <b>Incompatible materials</b>             | Strong oxidizing agents. Acids.   |
| <b>Hazardous decomposition products</b>   | Thermal decomposition may produce smoke, oxides of carbon and lower molecular weight organic compounds whose composition have not been characterized. Sulfur dioxide. Nitrogen oxides. Hydrocarbons. Aldehydes. |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Inhalation of oil mist or vapors formed during heating of the product will irritate the respiratory system and provoke coughing. Prolonged inhalation may be harmful. |
| <b>Skin contact</b> | Repeated exposure may cause skin dryness or cracking.   |
| <b>Eye contact</b>  | Direct contact with eyes may cause temporary irritation.  |
| <b>Ingestion</b>    | May cause discomfort if swallowed.  |

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation. Repeated exposure may cause skin dryness or cracking.

### Information on toxicological effects

**Acute toxicity** Not expected to be acutely toxic.

| Product                                  | Species  | Test Results |
|--|--|--------------|
| Husqvarna HP 2 Stroke Oil (CAS Mixture)  |  |              |
| <b>Acute</b>                             |  |              |
| <b>Dermal</b>                            |  |              |
| LD50                                     |  | > 5000 mg/kg |
| <b>Inhalation</b>                        |  |              |
| <i>Vapor</i>                             |  |              |
| LD50                                     |  | > 20 mg/l    |
| <b>Oral</b>                              |  |              |
| LD50                                     |  | > 5000 mg/kg |
| <b>Skin corrosion/irritation</b>         | Repeated exposure may cause skin dryness or cracking.  |              |
| <b>Serious eye damage/eye irritation</b> | Direct contact with eyes may cause temporary irritation.   |              |
| <b>Respiratory or skin sensitization</b> |  |              |
| <b>Respiratory sensitization</b>         |  |              |
|  | Not a respiratory sensitizer.  |              |
| <b>Skin sensitization</b>                |  |              |
|  | This product is not expected to cause skin sensitization.  |              |
| <b>Germ cell mutagenicity</b>            | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |              |
| <b>Carcinogenicity</b>                   | Not classifiable as to carcinogenicity to humans.  |              |

## **IARC Monographs. Overall Evaluation of Carcinogenicity**

Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7) 3 Not classifiable as to carcinogenicity to humans.

## **NTP Report on Carcinogens**

Not listed.

## **OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not regulated.

|   |   |
|---|---|
| <b>Reproductive toxicity</b>                              | This product is not expected to cause reproductive or developmental effects.  |
| <b>Specific target organ toxicity - single exposure</b>   | Not classified.   |
| <b>Specific target organ toxicity - repeated exposure</b> | Not classified.   |
| <b>Aspiration hazard</b>                                  | Not an aspiration hazard.   |
| <b>Chronic effects</b>                                    | Prolonged inhalation may be harmful.  |
| <b>Further information</b>                                | Repeated and prolonged overexposure to oil mists may result in droplet deposition, oil granuloma formation, inflammation and increased incidence of infection in the respiratory tract. |

## **12. Ecological information**

|                                      |  |
|--------------------------------------|--|
| <b>Ecotoxicity</b>                   | The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. |
| <b>Persistence and degradability</b> | This product is partially biodegradable.   |
| <b>Bioaccumulative potential</b>     | No data available on bioaccumulation.  |
| <b>Mobility in soil</b>              | The product is insoluble or slightly soluble in water.   |
| <b>Other adverse effects</b>         | Oil spills are generally hazardous to the environment. The product contains volatile organic compounds which have a photochemical ozone creation potential.  |

## **13. Disposal considerations**

|  |  |
|--|--|
| <b>Disposal instructions</b>                 | Collect and reclaim or dispose in sealed containers at licensed waste disposal site.   |
| <b>Local disposal regulations</b>            | Dispose in accordance with all applicable regulations.   |
| <b>Hazardous waste code</b>                  | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.   |
| <b>Waste from residues / unused products</b> | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| <b>Contaminated packaging</b>                | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.       |

## **14. Transport information**

### **DOT**

Not regulated as dangerous goods.

### **IATA**

Not regulated as dangerous goods.

### **IMDG**

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

## **15. Regulatory information**

**US federal regulations** This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

### **CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

### **SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations**

**US. Massachusetts RTK - Substance List**

Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)  
Mineral oil II (CAS Proprietary)  
Mineral oil III (CAS Proprietary)

**US. New Jersey Worker and Community Right-to-Know Act**

Distillates (petroleum), hydrotreated light (CAS 64742-47-8)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)  
Mineral oil II (CAS Proprietary)  
Mineral oil III (CAS Proprietary)

**US. Rhode Island RTK**

Distillates (petroleum), hydrotreated heavy paraffinic (CAS 64742-54-7)  
Mineral oil II (CAS Proprietary)  
Mineral oil III (CAS Proprietary)

**International Inventories**

| Country(s) or region        | Inventory name                                | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Canada                      | Domestic Substances List (DSL)                | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)           | No                     |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes                    |

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

**Issue date** 02-March-2018

**Revision date** -

**Version #** 01

**NFPA ratings**



**Disclaimer**

Husqvarna Group cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.