1 Chemical Product and Company Identification

Dekker Vacuum Technologies, Inc.
935 South Woodland Avenue
Michigan City, IN 46360-5672
(219)861-0661

Product Trade Name DURATEX HV STD 68 - (LTR) 5210-0002-016
CAS Number Not applicable for mixtures.
Synonyms None.
Generic Chemical Name Mixture.
Product Type Multipurpose.

2 Hazards Identification

Physical/Chemical
This product is combustible, but not classified as flammable. The creation of flammable vapor mixtures takes place at temperatures which are higher than normal ambient levels.

Health
If the product is handled or used at high temperature, contact with hot product or vapors may cause burns. Any material in case of accidents involving pressurized circuits and the like, may be accidentally injected under the skin, even without external damage. In such a case, the victim should be brought to an hospital as soon as possible, to get specialized medical treatment.

Environment
None.

Contaminants
In exceptional cases (i.e. prolonged storage in tanks contaminated with water, and presence of anaerobic sulfate-reducing microbial colonies), the product may undergo a degradation and generate small amounts of sulfur compounds, including H2S. See Heading 16.

See Section 11 for complete health hazard information.

3 Composition/Information on Ingredients

Substances Not Applicable
Mixtures
Composition/Information on Ingredients Mineral base oil, severely refined additives

Hazardous Ingredients
This material has no known hazards under applicable laws.

4 First Aid Measures

General
In case of spontaneous vomiting, transport the victim to a hospital, to verify the possibility that the product has been aspirated into the lungs.

Inhalation
Symptoms/Injuries This product has a low vapor pressure, and in normal conditions at ambient temperature the concentration in the air is negligible. A significant concentration may build up only if the product is used at high temperature, or in case of sprays and mists. In these cases overexposure to vapors may cause irritation to airways, nausea and dizziness.
First-Aid In case of disturbances owing to inhalation of vapors or mists, remove the victim from exposure; keep at rest; if necessary, seek medical attention.

Skin
Symptoms/Injuries Prolonged and repeated skin contact may cause reddening, irritation and dermatitis, due to a defatting effect. Contact with hot product may cause thermal burns.
First-Aid Take off contaminated clothing and shoes. Wash thoroughly with soap and water. If inflammation or irritation persists, seek medical advice. In case of contact with hot product, cool affected part with plenty of cold water, and cover with gauze or clean cloth. Call a doctor or bring to an hospital. Do not use salves or ointments, unless directed by doctor. Body hypothermia must be avoided. Do not put ice on the burn.

Eyes
Symptoms/Injuries Contact with eyes may cause a light transient irritation. Contact with a hot product or vapors may cause burns.
First-Aid Rinse eyes thoroughly for at least 10 minutes. Keep eyelids well apart. If irritation persists, seek medical advice. In case of contact with hot product, cool affected part with plenty of cold water, and cover with gauze or clean cloth. Call a doctor or bring to an hospital. Do not use salves or ointments, unless directed by doctor.

Ingestion
Symptoms/Injuries Accidental ingestion of small quantities of product may cause irritation, nausea and gastric disturbances. Taking into the account the taste of the product, however, ingestion of dangerous quantities is very unlikely.
First-Aid Do not induce vomiting to avoid aspiration into the lungs. If the person is conscious, rinse mouth with water without swallowing. Keep at rest. Call for medical assistance or bring to an hospital. If the casualty is
unconscious, place in the recovery position. In case of spontaneous vomiting, keep head low, to avoid the risk of aspiration into the lungs.

### 5 Fire Fighting Measures

<table>
<thead>
<tr>
<th>Extinguishing Media</th>
<th>Fire Fighting Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable Extinguishing Media</td>
<td>Small-size fires: carbon dioxide, dry chemicals, foam, sand or earth. Large fires: foam or water fog (mist). These means should be used by trained personnel only. Other extinguishing gases (according to regulations).</td>
</tr>
<tr>
<td>Unsuitable Extinguishing Media</td>
<td>Do not use water jets. They could cause splattering, and spread the fire.</td>
</tr>
</tbody>
</table>

**Special hazards arising from the substance or mixture**

- **Fire Hazard**: This product is combustible, but not classified as flammable. The creation of flammable vapor mixtures takes place at temperatures which are higher than normal ambient levels.
- **Explosion Hazard**: In case of losses from pressurized circuits, the sprays may form mists. Take into account that in this case the lower explosion limits for mists is about 45 g/m³ air.
- **Combustion Products**: Incomplete combustion is likely to give rise to a complex mixture of air born solid and liquid particulates, gases, including carbon monoxide, NOx, H2S and Sox, Oxygenated compounds (aldehydes, etc.) CaOx, ZnOx, POx.

**Advice for Fire Fighters**

- **Firefighting Instructions**: Shut off source of product, if possible. If possible move containers and drums away from danger area. Spilled product which is not burning should be covered with sand or foam. Use water sprays to cool containers and surfaces exposed to the flames. If the fire cannot be controlled, evacuate area.

- **Special Protective Equipment**: Personal protective equipment (see also sect. 8). Self-contained breathing apparatus.

**Other Information**: In case of fire, do not discharge residual product, waste materials and runoff water: collect separately and use a proper treatment.

### 6 Accidental Release Measures

<table>
<thead>
<tr>
<th>Personal Precautions, Protective Equipment and Emergency Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Measures</strong>: Stop of contain leak at the source, if safe to do so. Eliminate all ignition sources if safe to do so (e.g. electricity, sparks, fires, flares). Avoid accidental sprays on hot surfaces or electrical contacts. Avoid direct contact with released material.</td>
</tr>
<tr>
<td><strong>For Non-Emergency Personnel</strong></td>
</tr>
<tr>
<td><strong>Protective Equipment</strong>: See section 8.</td>
</tr>
<tr>
<td><strong>Emergency Procedures</strong>: Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in the case of small spillages, the feasibility of any actions should always be assessed and advised on by a trained, competent person in charge of managing the emergency.</td>
</tr>
<tr>
<td><strong>For Emergency Responders</strong></td>
</tr>
<tr>
<td><strong>Protective Equipment</strong>: Small spillages: normal antistatic working clothes are usually adequate. Large spillages: full body suit of chemically resistant and antistatic material. If necessary, heat resistant and insulated. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Gloves made of PVA are not water-resistant and are not suitable for emergency use. If contact with hot product is possible or anticipated, gloves should be heat resistant and thermally insulated. Work helmet. Antistatic, non-skid safety shoes or boots. Goggles and/or face shield. A half or full face respirator with filters for organic vapors. A self contained breathing apparatus can be used according to the extent of the spill and predictable amount of exposure.</td>
</tr>
<tr>
<td><strong>Emergency Procedures</strong>: Notify local authorities according to relevant regulations</td>
</tr>
<tr>
<td><strong>Environmental Precautions</strong>: Do not let the product flow into sewers, water courses or underground spaces. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations.</td>
</tr>
</tbody>
</table>

### 7 Handling and Storage

**Precautions for Safe Handling**: Ensure that all relevant regulations regarding handling and storage facilities of flammable products are followed. Do not use compressed air for filling, discharging or handling operations. Keep away from heat/sparks/open flames/hot surfaces. Use and store only outdoors or in a well ventilated area. During transfer and mixing operations, ensure that all equipment is correctly grounded. Avoid the build up of electrical charges. Emptied containers can contain combustible product residues. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been drained and cleaned. Before entering storage tanks and commencing any operation in a confined area (e.g. tunnels), carry out an adequate clean up and check the atmosphere for oxygen content, flammability and the presence of sulphur compounds. See also Section 16.

**Handling Temperature**: 0 - 65 °C
Hygiene Measures  
Avoid contact with skin. Do not breathe fume/mist/vapors. Do not ingest. Do not smoke. Do not eat and do not drink during use. Do not clean hands with dirty or oil soaked rags. Do not re-use clothes if they are still contaminated. Keep away from food and beverages.

Storage Conditions  
Store in dry, well ventilated area. Keep away from open flames, hot surfaces and sources of ignition. Do not smoke.

Storage Temperature  
0 - 55 °C

Incompatible Products  
Keep away from: strong oxidants

Storage Area  
Storage area layout, tank design, equipment and operating procedures must comply with the relevant national or local legislation. Storage installations should be designed so as to prevent ground and water pollution in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations.

Packages and Containers  
If the product is supplied in containers: Keep containers tightly closed and properly labeled. Keep only in the original container or in a suitable container for this kind of product.

Packaging Materials  
For containers or container linings use materials approved for use with this product. Recommended materials for containers or container linings: mild steel, stainless steel. Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Compatibility should be checked with the manufacturer.

<table>
<thead>
<tr>
<th>Control Parameters</th>
<th>Exposure Controls/Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mineral Base Oil, Severely Refined</strong></td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>MAK (mg/m³)</td>
</tr>
<tr>
<td>Belgium</td>
<td>Limit value (mg/m³)</td>
</tr>
<tr>
<td>Italy - Portugal - USA ACGIH</td>
<td>ACGIH TLV®-TWA (mg/m³)</td>
</tr>
<tr>
<td>Italy - Portugal - USA ACGIH</td>
<td>ACGIH TLV®-STEL (mg/m³)</td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (TWA) (mg/m3)</td>
</tr>
<tr>
<td>USA NIOSH</td>
<td>NIOSH REL (STEL) (mg/m3)</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m3)</td>
</tr>
<tr>
<td>Spain</td>
<td>VLA-ED (mg/m³)</td>
</tr>
<tr>
<td>Spain</td>
<td>VLA-EC (mg/m³)</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>MAC TGG 8h (mg/m³)</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>WEL TWA (mg/m³)</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>WEL STEL (mg/m³)</td>
</tr>
<tr>
<td>Denmark</td>
<td>Grænseværddie (langvarig) (mg/m3)</td>
</tr>
<tr>
<td>Denmark</td>
<td>Grænseværddie (kortvarig) (mg/m3)</td>
</tr>
<tr>
<td>Hungary</td>
<td>AK-érték</td>
</tr>
</tbody>
</table>
### Sweden
- **nivågränsvärde (NVG)** (mg/m³): 1 mg/m³ (Mineral base oil mist, severely refined, DMSO <3% m/m)
- **kortidsvärde (KTV)** (mg/m³): 3 mg/m³ (Mineral base oil mist, severely refined, DMSO <3% m/m)

### Canada (Quebec)
- **VECD (mg/m³)**: 10 mg/m³ (Mineral base oil mist, severely refined, DMSO <3% m/m)
- **VEMP (mg/m³)**: 5 mg/m³ (Mineral base oil mist, severely refined, DMSO <3% m/m)

### Distillates (petroleum), solvent-refined light paraffinic

<table>
<thead>
<tr>
<th>Country</th>
<th>Standard</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>MAK (mg/m³)</td>
<td>5 mg/m³</td>
<td>(Mineral base oil mist, severely refined, DMSO &lt;3% m/m)</td>
</tr>
<tr>
<td>Belgium</td>
<td>Limit value (mg/m³)</td>
<td>5 mg/m³</td>
<td>(Mineral base oil mist, severely refined, DMSO &lt;3% m/m)</td>
</tr>
<tr>
<td>Italy - Portugal - USA ACGIH</td>
<td>ACGIH TLV®-TWA (mg/m³)</td>
<td>5 mg/m³</td>
<td>(Mineral base oil mist, severely refined, DMSO &lt;3% m/m)</td>
</tr>
<tr>
<td>Italy - Portugal - USA ACGIH</td>
<td>ACGIH TLV®-STEL (mg/m³)</td>
<td>10 mg/m³</td>
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<td>USA NIOSH</td>
<td>NIOSH REL (TWA) (mg/m³)</td>
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<td>10 mg/m³</td>
<td>(Mineral base oil mist, severely refined, DMSO &lt;3% m/m)</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>5 mg/m³</td>
<td>(Mineral base oil mist, severely refined, DMSO &lt;3% m/m)</td>
</tr>
<tr>
<td>Spain</td>
<td>VLA-ED (mg/m³)</td>
<td>5 mg/m³</td>
<td>(Mineral base oil mist, severely refined, DMSO &lt;3% m/m)</td>
</tr>
<tr>
<td>Spain</td>
<td>VLA-EC (mg/m³)</td>
<td>10 mg/m³</td>
<td>(Mineral base oil mist, severely refined, DMSO &lt;3% m/m)</td>
</tr>
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<td>The Netherlands</td>
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</tr>
<tr>
<td>United Kingdom</td>
<td>WEL TWA (mg/m³)</td>
<td>5 mg/m³</td>
<td>(Mineral base oil mist, severely refined, DMSO &lt;3% m/m)</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>WEL STEL (mg/m³)</td>
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<td>Denmark</td>
<td>Grænseværdie (langvarig) (mg/m³)</td>
<td>1 mg/m³</td>
<td>(Mineral base oil mist, severely refined, DMSO &lt;3% m/m)</td>
</tr>
<tr>
<td>Denmark</td>
<td>Grænseværdie (kortvarig) (mg/m³)</td>
<td>2 mg/m³</td>
<td>(Mineral base oil mist, severely refined, DMSO &lt;3% m/m)</td>
</tr>
<tr>
<td>Hungary</td>
<td>AK-érték</td>
<td>5 mg/m³</td>
<td>(Mineral base oil mist, severely refined, DMSO &lt;3% m/m)</td>
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<td>Canada (Quebec)</td>
<td>VEMP (mg/m³)</td>
<td>5 mg/m³</td>
<td>(Mineral base oil mist, severely refined, DMSO &lt;3% m/m)</td>
</tr>
</tbody>
</table>

**DNEL/DMEL (Workers)**
- **Long Term Systemic Effects, Inhalation**: 5.4 mg/m³/day (DNEL, Mineral base oil mist, severely refined, DMSO <3% m/m)
- **Long Term Local Effects, Inhalation**: 1.2 mg/m³/day (DNEL, Mineral base oil mist, severely refined, DMSO <3% m/m)

**PNEC (Additional Information)**
- Not classified as hazardous for environment

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Monitoring methods: Monitoring procedures should be chosen according to the indications set by national authorities or labor contracts. Refer to relevant legislation and in any case to the good practice of industrial hygiene.

Additional information: Note: The Derived No Effect Level (DNEL) is an estimated safe level of exposure that is derived from toxicity data in accord with specific guidance within the European REACH regulation. The DNEL may differ from an Occupational Exposure Limit (OEL) for the same chemical. OELs may be recommended by an individual company, a governmental regulatory body or an expert organization, such as the Scientific Committee for Occupational Exposure Limits (SCOEL) or the American Conference of Governmental Industrial Hygienists (ACGIH). OELs are considered to be safe exposure levels for a typical worker in an occupational setting for an 8-hour work shift, 40 hour work week, as a time weighted average (TWA) or a 15 minute short-term exposure limit (STEL). While also considered to be protective of health, OELs are derived by a process different from that of REACH.

Exposure controls

Appropriate engineering controls:
Before entering storage tanks and commencing any operation in a confined area, carry out an adequate clean-up, and check the atmosphere for oxygen content, flammability, and the presence of sulphur compounds. See also Section 16, “Other information”.

Personal protective equipment (for industrial or professional use):
Face shield, gloves, protective clothing, safety glasses, safety shoes or boots, dust/aerosol mask.

Hand protection:
When there is a risk of contact with the skin, use hydrocarbon-resistant, felt-lined gloves. Materials that are presumably adequate: nitrile or PVC with a protection index > 5 (permeation time > 240 mins). Use gloves respecting all the conditions and within the limits set by the manufacturer. Replace gloves immediately in case of cuts, holes or other signs of damages or degradation. If necessary, refer to the EN 374 standard.

Eye protection:
When there is a risk of contact with the eyes, use safety goggles or other means of protection (face shield). If necessary, refer to national standards or to the EN 166 standard.

Skin and body protection:
Long-sleeved overalls. If necessary, refer to the EN 340 and related standards, for definition of characteristics and performance according to the risk rating of the area. Antistatic non-skid safety shoes or boots, chemical resistant, if necessary heat resistant and insulated.

Respiratory protection:
Independently from other possible actions (technical modifications, operating procedures, and other means to limit the exposure of workers), personal protection equipment can be used according to necessity. Open or well ventilated spaces: in presence of oil mists and if the product is handled without adequate containment means: use full or half-face masks with filter for mists/aerosols. In case there is a significant presence of vapors (e.g. through handling at high temperature), use full or half-face masks with filter for hydrocarbon vapors. Closed or confined areas (e.g. tank interiors): the use of protection measures for airways (masks or self-contained breathing apparatus), must be assessed according to the specific activity, as well as level and duration of predicted exposure.

Thermal hazard protection:
If contact with hot product is possible or anticipated, gloves should be heat-resistant and thermally insulated.

Environmental exposure controls:
Do not discharge the product into the environment. Storage areas/installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills. Prevent discharge of undissolved substance to or recover from onsite wastewater. Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed.

Consumer exposure controls:
No special requirements necessary, if handled at room temperature.

Hygiene measures

General protective and hygienic measures:
Avoid contact with skin and eyes. Do not breathe vapors or mists. Do not keep dirty rags in the overall pockets. Do not drink, eat or smoke with dirty hands. Wash hands with water and mild soap, do not use solvents or other irritant products which have a defatting effect on the skin. Do not re-use clothes, if they are still contaminated.

Information on basic physical and chemical properties

Physical State: Liquid
Appearance: Liquid, bright & clear
Molecular Mass: Not applicable for mixtures
Color: Yellow-brown
Odor: Light odor of petroleum
Odor Threshold: No data available.
pH: Not applicable
Relative Evaporation Rate: Negligible
Melting Point: Pour point ≤ -18°C (ASTM D 97)
Freezing Point: No data available
Boiling Point: ≥ 200°C (ASTM D 1160)
Flash point: \( \geq 175 \, ^\circ C \) (ASTM D 93)
Self ignition temperature: \( > 300 \, ^\circ C \) (DIN 51794)
Decomposition temperature: No data available
Flammability (solid, gas): No data available
Vapor pressure: \( \leq 0.1 \, hPa \) (20 °C) (Mineral oil, ASTM D 5191) (CONCAWE, 2010)
Relative vapor density at 20 °C: No data available
Relative density: No data available
Density: \(< 890 \, kg/m^3 \) (15 °C) (ASTM D 4052)
Solubility: Water: immiscible and insoluble
Log Pow: Not applicable for mixtures
Log Kow: No data available
Viscosity, kinematic: 64.6 – 71.4 mm\(^2\)/s (40 °C) (ASTM D 445)
Viscosity, dynamic: No data available
Explosive properties: None.
Oxidizing properties: None.
Explosive limits: LEL \( \geq 45 \, g/m^3 \) (Aerosol)

Other information
VOC content: = 0 % (EU, CH)

The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise noted.

### Stability and Reactivity

#### Reactivity
This mixture does not offer any further hazard for reactivity, except what is reported in the following paragraphs.

#### Chemical stability
Stable product, according to its intrinsic properties (in normal conditions of storage and handling).

#### Possibility of hazardous reactions
None (in normal conditions of storage and handling). Contact with strong oxidizers (peroxides, chromates, etc.) may cause a fire hazard. A mixture with nitrates or other strong oxidizers (e.g. chlorates, perchlorates, liquid oxygen) may create an explosive mass. Sensitivity to heat, friction or shock cannot be assessed in advance.

#### Conditions to avoid
Keep away from: strong oxidants. Keep away from open flames, hot surfaces and sources of ignition. Avoid the build-up of electrostatic charge.

#### Incompatible materials
Strong oxidants.

#### Hazardous decomposition products
In exceptional cases (i.e prolonged storage in tanks contaminated with water, and presence of anaerobic sulfate-reducing microbial colonies), the product may undergo a degradation and generate small amounts of sulfur compounds, including H2S. See also Section 16, “Other information”.

### Toxidological Information

#### Acute Toxicity
**Product:**
- LD50 oral rat > 2000 mg/kg (Calculated data).
- LD50 dermal rat > 2000 mg/kg (Calculated data).
- LC50 inhalation rat (mg/l) > 5 mg/l/4h (Calculated data).

Mineral base oil, severely refined:
- LD50 oral rat > 5000 mg/kg (OECD 401).
- LD50 dermal rat > 5000 mg/kg (OECD 402).
- LC50 inhalation rat (mg/l) > 5 mg/l/4h (OECD 403).

Distillates (petroleum), Solvent-refined light paraffinic:
- LD50 oral rat > 5000 mg/kg (OECD 401).
- LD50 dermal rat > 5000 mg/kg (OECD 402).
- LC50 inhalation rat (mg/l) > 5 mg/l/4h (OECD 403).

**Skin corrosion/irritation:** Not classified (Based on available data, the classification criteria are not met) (according to composition) pH: Not applicable.

**Serious eye damage/irritation:** Not classified (Based on available data, the classification criteria are not met) (according to composition) pH: Not applicable.

**Respiratory or skin sensitization:** Not classified (Based on available data, the classification criteria are not met) This product does not contain any significant amounts of substances classified as sensitizers (in any case < 0.1 % wt)

**Germ cell mutagenicity:** Not classified (Based on available data, the classification criteria are not met) This product does not contain any significant amounts of substances classified as mutagenic by the EU (in any case < 0.1 % wt)
Carcinogenicity: Not classified (Based on available data, the classification criteria are not met) 
None of the components of this product are listed as carcinogen by NTP, IARC, OSHA, EU or others. All the mineral base oils contained in this product have a value < 3 % wt of DMSO extract, according to IP 346/92 (Nota L - Dir. 94/69/CE - Reg (CE) 1272/2008)

Reproductive toxicity: Not classified (Based on available data, the classification criteria are not met) 
This product does not contain any significant amounts of substances classified as Toxic for Reproduction by the EU (in any case < 0.1 % wt)

Specific target organ toxicity (single exposure): Not classified (Based on available data, the classification criteria are not met) (according to composition)

Specific target organ toxicity (repeated exposure): Not classified (Based on available data, the classification criteria are not met) (according to composition)

Mineral base oil, severely refined 
LOAEL (oral,rat,90 days) = 125 mg/kg bodyweight/day (OECD TG 408)

Distillates (petroleum), solvent-refined light paraffinic 
LOAEL (oral,rat,90 days) = 125 mg/kg bodyweight/day (OECD TG 408)

Aspiration hazard: Not classified (Based on available data, the classification criteria are not met)

Viscosity, kinematic: > 20.5 mm2/s (40 °C) (ASTM D 445)

Potential Adverse human health effects and symptoms:
Prolonged and repeated skin contact may cause reddening, irritation and dermatitis, due to a defatting effect. Contact with eyes may cause temporary reddening and irritation

Other Information: None.

12 Ecological Information

Toxicity
Ecology – general: An uncontrolled release to the environment may produce a contamination of different environmental compartments (soil, underground, surface water bodies, aquifers). Handle according to general working hygiene practices to avoid pollution and release into the environment. According to the components, and by comparison with other products of the same type and composition, it is expected that this product has a toxicity for aquatic organisms > 100 mg/l, and must not be regarded as dangerous to the environment.

Ecology – air: This product has a low vapor pressure, and in normal conditions at ambient temperature the concentration in the air is negligible. A significant concentration may build up only if the product is used at high temperature, or in case of sprays and mists.

Ecology – water: This product is not soluble in water. It floats on water and forms a film on the surface. The damage to aquatic organisms is of mechanical kind (immobilization and entrapment)

Product: 
LC50 fishes 1 ≥ 100 mg/l (Calculated data).
LC50 other aquatic organisms 1 ≥ 100 mg/l (Calculated data).
EC50 Daphnia 1 ≥ 100 mg/l (Calculated data).
ErC50 (algae) ≥ 100 mg/l (Calculated data).

Mineral base oil, severely refined 
LC50 fishes 1 > 100 mg/l (LL 50)
LC50 fishes 1 10000 mg/l WAF, 48 h (OECD 202)

Reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-trans-butyl-4-hydroxyphenyl)propionate (125643-61-0) 
LC50 fish 1 > 74 mg/l (OECD203, 96h, Brachydania rerio) 
EC50 Daphnia 1 > 100 mg/l (OECD 202, 24h) 
ErC50 (algae) ≥ 3 mg/l (OECD 201,72 h, Scenedesmus subspicatus)

Distillates (petroleum), solvent-refined light paraffinic (64741-89-5) 
LC50 fish 1 > 100 mg/l (LL 50)
EC50 Daphnia 1 > 10000 mg/l WAF, 48 h (OECD 202)

Persistence and degradability Product: 
The most significant constituents of the product should be considered as “inherently biodegradable”, but not “readily biodegradable”, and they may be moderately persistent, particularly in anaerobic conditions.

Mineral base oil, severely refined 
The most significant constituents of the product should be considered as “inherently biodegradable”, but not “readily biodegradable”, and they may be moderately persistent, particularly in anaerobic conditions.

Distillates (petroleum), solvent-refined light paraffinic (64741-89-5) 
The most significant constituents of the product should be considered as “inherently biodegradable”, but not “readily biodegradable”, and they may be moderately persistent, particularly in anaerobic conditions.

Bioaccumulative potential
Product: Log Pow: Not applicable for mixtures
Mobility in Soil: No additional information available

Results of PBT and vPvB assessment
Product: This substance/mixture does not meet the PBT criteria of REACH, annex XIII.
The components in this formulation do not meet the criteria for classification as PBT or vPvB. The product should be considered as “Persistent” in the environment, according to the REACH Annex XIII criteria (1.1)

Mineral base oil, severely refined
This substance/mixture does not meet the PBT criteria of REACH, annex XIII.
The components in this formulation do not meet the criteria for classification as PBT or vPvB. The product should be considered as “Persistent” in the environment, according to the REACH Annex XIII criteria (1.1)

Distillates (petroleum), solvent-refined light paraffinic (64741-89-5)
This substance/mixture does not meet the PBT criteria of REACH, annex XIII.
The components in this formulation do not meet the criteria for classification as PBT or vPvB. The product should be considered as “Persistent” in the environment, according to the REACH Annex XIII criteria (1.1)

Other adverse effects: None.

Other information: This product has no specific properties for inhibition of bacterial activity. In any case, wastewater containing this product should be treated in plants that are suited for the specific purpose.

Disposal Considerations
Waste treatment methods: Do not dispose of the product, either new or used, by discharging into sewers, tunnels, lakes or water courses. Deliver to a qualified official collector.
Additional information: Empty containers may contain combustible product residues. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been cleaned, and declared safe.
Ecology - waste materials: The product as it is does not contain halogenated substances.

Transport Information
ICAO/IATA I: Not regulated.
ICAO/IATA II: Not regulated.
IMDG: Not regulated.
IMDG EMS Fire: Not applicable.
IMDG EMS Spill: Not applicable.
IMDG MFAG: Not applicable.
MARPOL Annex II: Not determined.
USCG Compatibility: Not determined.
U.S. DOT Bulk: Not regulated.
DOT NAERG: Not applicable.
U.S. DOT Intermediate NAERG: Not applicable.
U.S. DOT Non-Bulk: Not regulated.
U.S. DOT Non-Bulk NAERG: Not applicable.
Canada: Not regulated.
Mexico: Not regulated.

Review classification requirements before shipping materials at elevated temperatures.

Regulatory Information
-- Global Chemical Inventories --
USA: All components of this material are on the US TSCA Inventory or are exempt.
Other TSCA Reg.: None known.
Japan: All components are in compliance with the Chemical Substances Control Law of Japan.
Australia: All components are in compliance with chemical notification requirements in Australia.
New Zealand: All components are in compliance with chemical notification requirements in New Zealand.
Canada: All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
Switzerland: All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.
Korea: All components are in compliance in Korea.
All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

All components of this product are listed on the Inventory of Existing Chemical Substances in China.

All components of this product are listed on the Taiwan inventory.

This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substances list.

This product does not contain greater than 1.0% (greater than 0.1% for carcinogenic substance) of any chemical substances listed under SARA Section 313.

None known.

This product does not intentionally contain any chemicals known by the State of California to cause cancer and/or birth defects. Moreover, we do not routinely analyze its products for impurities which may be such chemicals.

Not applicable.

Not Registered

Not Registered

Not Registered

Not Registered

Not Registered

Not Registered

Not Registered

Not Registered

Not determined.

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(N/E) - None established

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This material has no known health hazards.

Revision Indicators

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local regulations remains the responsibility of the user.