1. Identification

Product identifier: URETHANE FLOW ENHANCER

Other means of identification: KUS KE218

Product code

Recommended use: Industrial applications.

Recommended restrictions: Professional use only

Manufacturer/Importer/Supplier/Distributor information

Manufacturer: Custom Shop

Address: 6695 Rasha St.

San Diego, CA 92121

United States

Telephone: Customer Service (858) 909-2110

Emergency phone number: CHEMTREC (800) 424-9300

2. Hazard(s) identification

Physical hazards

Flammable liquids Category 2

Health hazards

Acute toxicity, oral Category 4

Acute toxicity, dermal Category 4

Acute toxicity, inhalation Category 4

Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A

Reproductive toxicity Category 1

Specific target organ toxicity, single exposure Category 3 narcotic effects

Specific target organ toxicity, repeated exposure Category 2

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements

Signal word: Danger

Hazard statement: Highly flammable liquid and vapor. Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause drowsiness or dizziness. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection. Wear protective gloves/protective clothing/eye protection/face protection.
Response

If swallowed: Call a poison center/doctor if you feel unwell. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. Rinse mouth. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish.

Storage


Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

Supplemental information

63.11% of the mixture consists of component(s) of unknown acute dermal toxicity.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-BUTYL ACETATE</td>
<td></td>
<td>123-86-4</td>
<td>20 - &lt; 30</td>
</tr>
<tr>
<td>ETHYL ACETATE</td>
<td></td>
<td>141-78-6</td>
<td>15 - &lt; 25</td>
</tr>
<tr>
<td>ETHYLENE GLYCOL MONOETHYL ETHER ACETATE</td>
<td></td>
<td>111-15-9</td>
<td>15 - &lt; 25</td>
</tr>
<tr>
<td>TOLUENE</td>
<td></td>
<td>108-88-3</td>
<td>8 - &lt; 12</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn’t get into the lungs. Get medical advice/attention if you feel unwell.

Most important symptoms/effects, acute and delayed

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information

Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Alcohol resistant foam. Water fog. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.
<table>
<thead>
<tr>
<th>Special protective equipment and precautions for firefighters</th>
<th>Self-contained breathing apparatus and full protective clothing must be worn in case of fire.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire fighting equipment/instructions</td>
<td>In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.</td>
</tr>
<tr>
<td>Specific methods</td>
<td>Use standard firefighting procedures and consider the hazards of other involved materials.</td>
</tr>
<tr>
<td>General fire hazards</td>
<td>Highly flammable liquid and vapor.</td>
</tr>
</tbody>
</table>

### 6. Accidental release measures

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

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

#### Methods and materials for containment and cleaning up

**Large Spills:** Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

**Small Spills:** Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

### 7. Handling and storage

#### Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharge. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".

#### Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).
8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYL ACETATE (CAS 141-78-6)</td>
<td>PEL</td>
<td>1400 mg/m³</td>
</tr>
<tr>
<td>ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9)</td>
<td>PEL</td>
<td>540 mg/m³</td>
</tr>
<tr>
<td>n-BUTYL ACETATE (CAS 123-86-4)</td>
<td>PEL</td>
<td>100 ppm</td>
</tr>
</tbody>
</table>

**US. OSHA Table Z-2 (29 CFR 1910.1000)**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td>Ceiling</td>
<td>300 ppm</td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td>TWA</td>
<td>200 ppm</td>
</tr>
</tbody>
</table>

**US. ACGIH Threshold Limit Values**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYL ACETATE (CAS 141-78-6)</td>
<td>TWA</td>
<td>400 ppm</td>
</tr>
<tr>
<td>ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9)</td>
<td>TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td>n-BUTYL ACETATE (CAS 123-86-4)</td>
<td>STEL</td>
<td>200 ppm</td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td>TWA</td>
<td>150 ppm</td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td>TWA</td>
<td>20 ppm</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYL ACETATE (CAS 141-78-6)</td>
<td>TWA</td>
<td>1400 mg/m³</td>
</tr>
<tr>
<td>ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9)</td>
<td>TWA</td>
<td>2.7 mg/m³</td>
</tr>
<tr>
<td>n-BUTYL ACETATE (CAS 123-86-4)</td>
<td>STEL</td>
<td>0.5 ppm</td>
</tr>
<tr>
<td>n-BUTYL ACETATE (CAS 123-86-4)</td>
<td>TWA</td>
<td>950 mg/m³</td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td>STEL</td>
<td>200 ppm</td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td>TWA</td>
<td>710 mg/m³</td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td>TWA</td>
<td>150 ppm</td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td>TWA</td>
<td>375 mg/m³</td>
</tr>
</tbody>
</table>

**Biological limit values**

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9)</td>
<td>100 mg/g</td>
<td>2-Ethoxyacetic acid</td>
<td>Creatinine in urine</td>
<td>*</td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td>0.3 mg/g</td>
<td>o-Cresol, with hydrolysis</td>
<td>Creatinine in urine</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Toluene Urine</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.03 mg/l</td>
<td>Toluene</td>
<td>Blood</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>0.02 mg/l</td>
<td>Toluene</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* - For sampling details, please see the source document.
Exposure guidelines

US - California OELs: Skin designation
ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9) Can be absorbed through the skin.
TOLUENE (CAS 108-88-3) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies
ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9) Skin designation applies.
TOLUENE (CAS 108-88-3) Skin designation applies.

US - Tennessee OELs: Skin designation
ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation
ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation
ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9) Can be absorbed through the skin.

Appropriate engineering controls
Explosion-proof general and local exhaust ventilation. 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. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment
Eye/face protection
Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection
Hand protection
Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other
Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection
Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
When using do not smoke. Keep away from food and drink. 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
Physical state Liquid.
Form Liquid.
Color Clear water-white.
Odor Mild.
Odor threshold Not available.

pH Not available.
Melting point/freezing point
-119.2 °F (-84 °C) estimated

Initial boiling point and boiling range
169.7 °F (76.5 °C) estimated

Flash point
26.6 °F (-3.0 °C) estimated
Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits
Flammability limit - lower
1.3 % estimated

Material name: URETHANE FLOW ENHANCER
KE218 Version #: 01 Issue date: 07-12-2016
Flammability limit - upper (%)  7.5 % estimated
Explosive limit - lower (%)  Not available.
Explosive limit - upper (%)  Not available.
Vapor pressure  35.71 hPa estimated
Vapor density  Not available.
Relative density  Not available.
Solubility(ies)
   Solubility (water)  Not available.
Partition coefficient (n-octanol/water)  Not available.
Auto-ignition temperature  714.2 °F (379 °C) estimated
Decomposition temperature  Not available.
Viscosity  Not available.
Other information
   Density  7.53 lbs/gal
   Explosive properties  Not explosive.
   Flammability class  Flammable IB estimated
   Oxidizing properties  Not oxidizing.
   Percent volatile  100 %
   Specific gravity  0.9
   VOC  7.53 lbs/gal (902.83 g/l) Coating VOC
       7.53 lbs/gal (902.83 g/l) Material VOC
   VOC composite vapor pressure  73 mm Hg at 68°F

10. Stability and reactivity
Reactivity  The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability  Material is stable under normal conditions.
Possibility of hazardous reactions  Hazardous polymerization does not occur.
Conditions to avoid  Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials  Strong oxidizing agents. Nitrates.
Hazardous decomposition products  No hazardous decomposition products are known.

11. Toxicological information
Information on likely routes of exposure
   Inhalation  Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting.
   Skin contact  Harmful in contact with skin. Causes skin irritation.
   Eye contact  Causes serious eye irritation.
   Ingestion  Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics  Headache. May cause drowsiness and dizziness. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects
Acute toxicity  Harmful if inhaled. Harmful in contact with skin. Harmful if swallowed. Narcotic effects.
<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYL ACETATE (CAS 141-78-6)</td>
<td><strong>Acute</strong> Inhalation</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mouse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rabbit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td><strong>Oral</strong> LD50</td>
<td>Mouse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rabbit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9)</td>
<td><strong>Acute</strong> Dermal LD50</td>
<td>Rabbit</td>
</tr>
<tr>
<td></td>
<td><strong>Inhalation</strong> LC50</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td><strong>Oral</strong> LD50</td>
<td>Pig</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rabbit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rat</td>
</tr>
<tr>
<td>n-BUTYL ACETATE (CAS 123-86-4)</td>
<td><strong>Acute</strong> Inhalation LC50</td>
<td>Wistar rat</td>
</tr>
<tr>
<td></td>
<td><strong>Oral</strong> LD50</td>
<td>Rat</td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td><strong>Acute</strong> Inhalation LC50</td>
<td>Mouse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Oral</strong> LD50</td>
<td>Rat</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation**
Causes skin irritation.

**Serious eye damage/eye irritation**
Causes serious eye irritation.

**Respiratory or skin sensitization**
- **Respiratory sensitization**
  Not a respiratory sensitizer.
- **Skin sensitization**
  This product is not expected to cause skin sensitization.
Germ cell mutagenicity
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity
TOLUENE (CAS 108-88-3) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Reproductive toxicity
May damage fertility or the unborn child.

Specific target organ toxicity - single exposure
May cause drowsiness and dizziness.

Specific target organ toxicity - repeated exposure
May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard
Not an aspiration hazard.

Chronic effects
May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity
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.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYL ACETATE (CAS 141-78-6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td>Fish</td>
<td>LC50</td>
</tr>
<tr>
<td>ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9)</td>
<td>Aquatic</td>
<td>Fish</td>
</tr>
<tr>
<td>n-BUTYL ACETATE (CAS 123-86-4)</td>
<td>Aquatic</td>
<td>Fish</td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td>Aquatic</td>
<td>Crustacea</td>
</tr>
<tr>
<td></td>
<td>Fish</td>
<td>LC50</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential

| Partition coefficient n-octanol / water (log Kow) | ETHYL ACETATE | 0.73 |
|                                               | n-BUTYL ACETATE | 1.78 |
|                                               | TOLUENE         | 2.73 |

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
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).
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

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN1263</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Paint related material including paint thinning, drying, removing, or reducing compound</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>3</td>
</tr>
<tr>
<td>Class</td>
<td>-</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Label(s)</td>
<td>3</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Special precautions for user</td>
<td>Read safety instructions, SDS and emergency procedures before handling.</td>
</tr>
<tr>
<td>Special provisions</td>
<td>149, B52, IB2, T4, TP1, TP8, TP28</td>
</tr>
<tr>
<td>Packaging exceptions</td>
<td>150</td>
</tr>
<tr>
<td>Packaging non bulk</td>
<td>173</td>
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<tr>
<td>Packaging bulk</td>
<td>242</td>
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IATA

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN1263</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>Paint related material (including paint thinning or reducing compounds)</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>3</td>
</tr>
<tr>
<td>Class</td>
<td>-</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No.</td>
</tr>
<tr>
<td>ERG Code</td>
<td>3L</td>
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<tr>
<td>Special precautions for user</td>
<td>Read safety instructions, SDS and emergency procedures before handling.</td>
</tr>
<tr>
<td>Other information</td>
<td>Allowed.</td>
</tr>
<tr>
<td>Passenger and cargo aircraft</td>
<td>Allowed.</td>
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</tbody>
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IMDG

<table>
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<tr>
<th>UN number</th>
<th>UN1263</th>
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</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>3</td>
</tr>
<tr>
<td>Class</td>
<td>-</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Marine pollutant No.</td>
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<tr>
<td>Environmental hazards</td>
<td>EmS F-E, S-E</td>
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<tr>
<td>Special precautions for user</td>
<td>Read safety instructions, SDS and emergency procedures before handling.</td>
</tr>
<tr>
<td>Transport in bulk according to</td>
<td>Not established.</td>
</tr>
<tr>
<td>Annex II of MARPOL 73/78 and the IBC Code</td>
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</tr>
</tbody>
</table>

DOT

Contaminated packaging

Material name: URETHANE FLOW ENHANCER

KE218 Version #: 01 Issue date: 07-12-2016
15. Regulatory information

US federal regulations

This product is 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)

ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9) 1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

ETHYL ACETATE (CAS 141-78-6) Listed.
ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9) Listed.
n-BUTYL ACETATE (CAS 123-86-4) Listed.
TOLUENE (CAS 108-88-3) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
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<tbody>
<tr>
<td>ETHYLENE GLYCOL MONOETHYL ETHER ACETATE</td>
<td>111-15-9</td>
<td>20 - &lt; 30</td>
</tr>
<tr>
<td>TOLUENE</td>
<td>108-88-3</td>
<td>10 - &lt; 20</td>
</tr>
</tbody>
</table>

Other federal regulations

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

ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9)
TOLUENE (CAS 108-88-3)

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

Not regulated.

Safe Drinking Water Act (SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

TOLUENE (CAS 108-88-3) 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

TOLUENE (CAS 108-88-3) 35 %WV

DEA Exempt Chemical Mixtures Code Number

TOLUENE (CAS 108-88-3) 594
US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))
ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9)
TOLUENE (CAS 108-88-3)

US. Massachusetts RTK - Substance List
ETHYL ACETATE (CAS 141-78-6)
ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9)
n-BUTYL ACETATE (CAS 123-86-4)
TOLUENE (CAS 108-88-3)

US. New Jersey Worker and Community Right-to-Know Act
ETHYL ACETATE (CAS 141-78-6)
ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9)
n-BUTYL ACETATE (CAS 123-86-4)
TOLUENE (CAS 108-88-3)

US. Pennsylvania Worker and Community Right-to-Know Law
ETHYL ACETATE (CAS 141-78-6)
ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9)
n-BUTYL ACETATE (CAS 123-86-4)
TOLUENE (CAS 108-88-3)

US. Rhode Island RTK
ETHYL ACETATE (CAS 141-78-6)
ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9)
n-BUTYL ACETATE (CAS 123-86-4)
TOLUENE (CAS 108-88-3)

US. California Proposition 65
WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance
BENZENE (CAS 71-43-2) Listed: February 27, 1987

US - California Proposition 65 - CRT: Listed date/Developmental toxin
BENZENE (CAS 71-43-2) Listed: December 26, 1997
ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9) Listed: January 1, 1993
TOLUENE (CAS 108-88-3) Listed: January 1, 1991

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin
TOLUENE (CAS 108-88-3) Listed: August 7, 2009

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin
BENZENE (CAS 71-43-2) Listed: December 26, 1997
ETHYLENE GLYCOL MONOETHYL ETHER ACETATE (CAS 111-15-9) Listed: January 1, 1993

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply 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: 12-22-2015
Version #: 01
HMIS® ratings
Health: 2*
Flammability: 3
Physical hazard: 0

NFPA ratings
Health: 2
Flammability: 3
Instability: 0
NFPA ratings

Disclaimer

The information contained herein is based on data supplied to us from sources believed to be reliable at the date of issue. Nothing herein shall be deemed to create any warranty of any kind, express or implied, concerning the accuracy or completeness of the information provided or the results to be obtained from the use thereof. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage, transportation, handling and disposal of the product in compliance with applicable federal, state and local laws and regulations. This information relates to the material designated and may not be valid for such material used in combination with any other materials nor in any process.