1. Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>14.5oz PD Red</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other means of identification</td>
<td>Product Code: 11601-6</td>
</tr>
<tr>
<td>Recommended use</td>
<td>Not available.</td>
</tr>
<tr>
<td>Manufacturer/Importer/Supplier/Distributor information</td>
<td></td>
</tr>
<tr>
<td>Manufacturer</td>
<td>Plasti Dip International</td>
</tr>
<tr>
<td>Address</td>
<td>3920 Pheasant Ridge Drive</td>
</tr>
<tr>
<td></td>
<td>Blaine, MN 55449</td>
</tr>
<tr>
<td></td>
<td>United States</td>
</tr>
<tr>
<td>Telephone</td>
<td>General Assistance 763-785-2156</td>
</tr>
<tr>
<td>Website</td>
<td>Plastidip.com</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:Pdi@Plastidip.com">Pdi@Plastidip.com</a></td>
</tr>
<tr>
<td>Emergency phone number</td>
<td>Chemtrec/INTL 800-424-9300/703-527-3887</td>
</tr>
</tbody>
</table>

2. Hazard(s) identification

<table>
<thead>
<tr>
<th>Physical hazards</th>
<th>Flammable liquids Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health hazards</td>
<td>Acute toxicity, oral Category 4</td>
</tr>
<tr>
<td></td>
<td>Skin corrosion/irritation Category 2</td>
</tr>
<tr>
<td></td>
<td>Serious eye damage/eye irritation Category 2A</td>
</tr>
<tr>
<td></td>
<td>Reproductive toxicity Category 2</td>
</tr>
<tr>
<td></td>
<td>Specific target organ toxicity, single exposure Category 3 narcotic effects</td>
</tr>
<tr>
<td></td>
<td>Specific target organ toxicity, repeated exposure Category 1</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Hazardous to the aquatic environment, acute hazard Category 2</td>
</tr>
<tr>
<td></td>
<td>Hazardous to the aquatic environment, long-term hazard Category 2</td>
</tr>
<tr>
<td>OSHA defined hazards</td>
<td>Not classified.</td>
</tr>
</tbody>
</table>

3. Label elements

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Danger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard statement</td>
<td>Highly flammable liquid and vapor. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>Precautionary statement</td>
<td></td>
</tr>
<tr>
<td>Prevention</td>
<td>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. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.</td>
</tr>
</tbody>
</table>
**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. Collect spillage.

**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**

61.53% of the mixture consists of component(s) of unknown acute oral toxicity. 67.89% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 67.89% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

### 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>ALIPHATIC PETROLEUM DISTILLATES</td>
<td></td>
<td>64742-89-8</td>
<td>30 to &lt;40</td>
</tr>
<tr>
<td>N-HEXANE</td>
<td></td>
<td>110-54-3</td>
<td>10 to &lt;20</td>
</tr>
<tr>
<td>TOLUENE</td>
<td></td>
<td>108-88-3</td>
<td>10 to &lt;20</td>
</tr>
<tr>
<td>METHYL ETHYL KETONE</td>
<td></td>
<td>78-93-3</td>
<td>5 to &lt;10</td>
</tr>
<tr>
<td>MINERAL SPIRITS</td>
<td></td>
<td>8052-41-3</td>
<td>0.1 to &lt;1</td>
</tr>
</tbody>
</table>

Other components below reportable levels 20 to <30

*Designates that a specific chemical identity and/or percentage 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. Call a POISON CENTER or doctor/physician if you feel unwell.

#### Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. 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

Water fog. Foam. 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.
Precautions for safe handling

Environmental precautions

- Containment and cleaning up:
  - 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.
  - Large Spills: Stop the flow of material, if this is without risk. 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.

Special protective equipment and precautions for firefighters

- Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

- In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods

- Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards

- Highly flammable liquid and vapor.

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

- Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Prevent product from entering drains.

Environmental precautions

- Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

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 discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. 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. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. 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>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)</th>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYL ETHYL KETONE (CAS 78-93-3)</td>
<td>PEL</td>
<td>590 mg/m3</td>
<td></td>
</tr>
<tr>
<td>MINERAL SPIRITS (CAS 8052-41-3)</td>
<td>PEL</td>
<td>200 ppm</td>
<td></td>
</tr>
<tr>
<td>N-HEXANE (CAS 110-54-3)</td>
<td>PEL</td>
<td>2900 mg/m3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>500 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1800 mg/m3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>500 ppm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. OSHA Table Z-2 (29 CFR 1910.1000)</th>
<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>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>200 ppm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values</th>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYL ETHYL KETONE (CAS 78-93-3)</td>
<td>STEL</td>
<td>300 ppm</td>
<td></td>
</tr>
<tr>
<td>MINERAL SPIRITS (CAS 8052-41-3)</td>
<td>TWA</td>
<td>200 ppm</td>
<td></td>
</tr>
<tr>
<td>N-HEXANE (CAS 110-54-3)</td>
<td>TWA</td>
<td>100 ppm</td>
<td></td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td>TWA</td>
<td>50 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>20 ppm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. NIOSH: Pocket Guide to Chemical Hazards</th>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYL ETHYL KETONE (CAS 78-93-3)</td>
<td>STEL</td>
<td>885 mg/m3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>300 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>590 mg/m3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 ppm</td>
<td></td>
</tr>
<tr>
<td>MINERAL SPIRITS (CAS 8052-41-3)</td>
<td>Ceiling</td>
<td>1800 mg/m3</td>
<td></td>
</tr>
<tr>
<td>N-HEXANE (CAS 110-54-3)</td>
<td>TWA</td>
<td>350 mg/m3</td>
<td></td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td>TWA</td>
<td>180 mg/m3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>50 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>150 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>375 mg/m3</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>100 ppm</td>
<td></td>
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</tbody>
</table>

Biological limit values

<table>
<thead>
<tr>
<th>ACGIH Biological Exposure Indices</th>
<th>Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYL ETHYL KETONE (CAS 78-93-3)</td>
<td>2 mg/l</td>
<td>MEK</td>
<td>Urine</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>N-HEXANE (CAS 110-54-3) 0.4 mg/l</td>
<td>2,5-Hexanediazon, without hydrolysis</td>
<td>Urine</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3) 0.3 mg/g</td>
<td>o-Cresol, with hydrolysis</td>
<td>Creatinine in urine</td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.03 mg/l</td>
<td>Toluene</td>
<td>Urine</td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>
ACGIH Biological Exposure Indices

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>0.02 mg/l</td>
<td>Toluene</td>
<td>Blood</td>
<td>*</td>
</tr>
</tbody>
</table>

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

Exposure guidelines

**US - California OELs: Skin designation**
- N-HEXANE (CAS 110-54-3) Can be absorbed through the skin.
- TOLUENE (CAS 108-88-3) Can be absorbed through the skin.

**US - Minnesota Haz Subs: Skin designation applies**
- TOLUENE (CAS 108-88-3) Skin designation applies.

**US ACGIH Threshold Limit Values: Skin designation**
- N-HEXANE (CAS 110-54-3) 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**
- Wear safety glasses with side shields (or goggles).

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

**Respiratory protection**
- 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.

**Thermal hazards**
- Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**
- Observe any medical surveillance requirements. 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**
  - Not available.
- **Odor**
  - Not available.
- **Odor threshold**
  - Not available.
- **pH**
  - Not available.
- **Melting point/freezing point**
  - -138.82 °F (-94.9 °C) estimated
- **Initial boiling point and boiling range**
  - 155.66 °F (68.7 °C) estimated
- **Flash point**
  - 20.0 °F (-6.7 °C) estimated
- **Evaporation rate**
  - Not available.
- **Flammability (solid, gas)**
  - Not applicable.

**Upper/lower flammability or explosive limits**
- **Flammability limit - lower (%)**
  - 1.1 % estimated
- **Flammability limit - upper (%)**
  - 10 % estimated
- **Explosive limit - lower (%)**
  - Not available.
- **Explosive limit - upper (%)**
  - Not available.
Vapor pressure 125.63 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 437 °F (225 °C) estimated
Decomposition temperature Not available.
Viscosity Not available.

Other information
  Density 7.03 lbs/gal
  Explosive properties Not explosive.
  Flammability class Flammable IB estimated
  Oxidizing properties Not oxidizing.
  Percent volatile 73.01
  Specific gravity 0.84
  VOC 5.13 lbs/gal Regulatory

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.
Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information
Information on likely routes of exposure
  Inhalation May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting.
  Skin contact Causes skin irritation.
  Eye contact Causes serious eye irritation.
  Ingestion Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics
  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.

Information on toxicological effects
Acute toxicity Harmful if swallowed. Narcotic effects.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYL ETHYL KETONE (CAS 78-93-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>&gt; 8000 mg/kg</td>
</tr>
<tr>
<td>Inhale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Mouse</td>
<td>11000 ppm, 45 Minutes</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>11700 ppm, 4 Hours</td>
</tr>
</tbody>
</table>

Material name: 14.5oz PD Red
11601-6  Version #: 10  Revision date: 01-07-2016  Issue date: 06-05-2015
### Test Results

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>Mouse</td>
<td>670 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>2300 - 3500 mg/kg</td>
</tr>
</tbody>
</table>

**N-HEXANE (CAS 110-54-3)**

**Acute**

- **Inhalation**
  - LC50 Mouse: 48000 ppm, 4 Hours
- **Oral**
  - LD50 Rat: 24 mg/kg
  - Wistar rat: 49 mg/kg

**TOLUENE (CAS 108-88-3)**

**Acute**

- **Dermal**
  - LD50 Rabbit: 12124 mg/kg
  - 14.1 ml/kg

- **Inhalation**
  - LC50 Mouse: 5320 ppm, 8 Hours
  - 400 ppm, 24 Hours
  - Rat: 26700 ppm, 1 Hours
  - 12200 ppm, 2 Hours
  - 8000 ppm, 4 Hours

- **Oral**
  - LD50 Rat: 2.6 g/kg

* 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**

- MINERAL SPIRITS (CAS 8052-41-3) 3 Not classifiable as to carcinogenicity to humans.
- TOLUENE (CAS 108-88-3) 3 Not classifiable as to carcinogenicity to humans.


- Not regulated.

**US. National Toxicology Program (NTP) Report on Carcinogens**

- Not listed.

**Reproductive toxicity**

- Suspected of damaging fertility or the unborn child.

**Specific target organ toxicity - single exposure**

- May cause drowsiness and dizziness.

**Specific target organ toxicity - repeated exposure**

- Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard**

- Not an aspiration hazard.

**Chronic effects**

- Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful.

### 12. Ecological information

**Ecotoxicity**

- Toxic to aquatic life with long lasting effects.
Components Test Results

**Species**

**METHYL ETHYL KETONE (CAS 78-93-3)**

*Aquatic*
- **Crustacea** EC50 Water flea (Daphnia magna) 4025 - 6440 mg/l, 48 hours
- **Fish** LC50 Sheepshead minnow (Cyprinodon variegatus) > 400 mg/l, 96 hours

**N-HEXANE (CAS 110-54-3)**

*Aquatic*
- **Fish** LC50 Fathead minnow (Pimephales promelas) 2.101 - 2.981 mg/l, 96 hours

**TOLUENE (CAS 108-88-3)**

*Aquatic*
- **Crustacea** EC50 Water flea (Daphnia magna) 5.46 - 9.83 mg/l, 48 hours
- **Fish** LC50 Coho salmon, silver salmon (Oncorhynchus kisutch) 8.11 mg/l, 96 hours

* 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)**

<table>
<thead>
<tr>
<th>Component</th>
<th>log Kow</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHYL ETHYL KETONE</td>
<td>0.29</td>
</tr>
<tr>
<td>MINERAL SPIRITS</td>
<td>3.16 - 7.15</td>
</tr>
<tr>
<td>N-HEXANE</td>
<td>3.9</td>
</tr>
<tr>
<td>TOLUENE</td>
<td>2.73</td>
</tr>
</tbody>
</table>

**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. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. 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).

**Contaminated packaging**

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><strong>UN number</strong></th>
<th>UN1139</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UN proper shipping name</strong></td>
<td>Coating solution</td>
</tr>
<tr>
<td><strong>Transport hazard class(es)</strong></td>
<td>3</td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
<tr>
<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Label(s)</td>
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<tr>
<td><strong>Packing group</strong></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, IB2, T4, TP1, TP8</td>
</tr>
<tr>
<td>Packaging exceptions</td>
<td>150</td>
</tr>
<tr>
<td>Packaging non bulk</td>
<td>202</td>
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<tr>
<td>Packaging bulk</td>
<td>242</td>
</tr>
<tr>
<td><strong>IATA</strong></td>
<td></td>
</tr>
<tr>
<td><strong>UN number</strong></td>
<td>UN1139</td>
</tr>
</tbody>
</table>
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)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

- METHYL ETHYL KETONE (CAS 78-93-3) Listed.
- N-HEXANE (CAS 110-54-3) Listed.
- TOLUENE (CAS 108-88-3) Listed.
SARA 304 Emergency release notification
Not regulated.

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

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>
</tr>
</thead>
<tbody>
<tr>
<td>N-HEXANE</td>
<td>110-54-3</td>
<td>10 to &lt;20</td>
</tr>
<tr>
<td>TOLUENE</td>
<td>108-88-3</td>
<td>10 to &lt;20</td>
</tr>
</tbody>
</table>

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
N-HEXANE (CAS 110-54-3)
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
METHYL ETHYL KETONE (CAS 78-93-3) 6714
TOLUENE (CAS 108-88-3) 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))
METHYL ETHYL KETONE (CAS 78-93-3) 35 %WV
TOLUENE (CAS 108-88-3) 35 %WV

DEA Exempt Chemical Mixtures Code Number
METHYL ETHYL KETONE (CAS 78-93-3) 6714
TOLUENE (CAS 108-88-3) 594

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace
METHYL ETHYL KETONE (CAS 78-93-3) Low priority

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))
ALIPHATIC PETROLEUM DISTILLATES (CAS 64742-89-8)
METHYL ETHYL KETONE (CAS 78-93-3)
MINERAL SPIRITS (CAS 8052-41-3)
N-HEXANE (CAS 110-54-3)
TOLUENE (CAS 108-88-3)

US. Massachusetts RTK - Substance List
METHYL ETHYL KETONE (CAS 78-93-3)
MINERAL SPIRITS (CAS 8052-41-3)
N-HEXANE (CAS 110-54-3)
TOLUENE (CAS 108-88-3)

US. New Jersey Worker and Community Right-to-Know Act
METHYL ETHYL KETONE (CAS 78-93-3)
N-HEXANE (CAS 110-54-3)
TOLUENE (CAS 108-88-3)
US. Pennsylvania Worker and Community Right-to-Know Law
METHYL ETHYL KETONE (CAS 78-93-3)
MINERAL SPIRITS (CAS 8052-41-3)
N-HEXANE (CAS 110-54-3)
TOLUENE (CAS 108-88-3)

US. Rhode Island RTK
METHYL ETHYL KETONE (CAS 78-93-3)
N-HEXANE (CAS 110-54-3)
TOLUENE (CAS 108-88-3)

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

US - California Proposition 65 - CRT: Listed date/Developmental toxin
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

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>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<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 06-05-2015
Revision date 01-07-2016
Version # 10

HMIS® ratings
Health: 2* Flammability: 3 Physical hazard: 0

NFPA ratings
Health: 2 Flammability: 3 Instability: 0

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