SAFETY DATA SHEET

1. Identification

Product identifier Royston R28 Mastic

Other means of identification

Synonyms Roskote R28 Mastic

Recommended use Not available.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name CHASE CORPORATION Blawnox Plant

Address 128 1st Street

Blawnox, PA 15238-3223

United States

Telephone 866-932-0800

E-mail Not available.

Emergency phone number 800-424-9300 Chemtrec, US

703-527-3887 Chemtrec, outside of US

2. Hazard(s) identification

Physical hazards Flammable liquids Category 2

Health hazards Skin corrosion/irritation Category 2

Reproductive toxicity Category 2

Specific target organ toxicity, single exposure Category 3 narcotic effects

Specific target organ toxicity, repeated exposure Category 2

Aspiration hazard Category 1

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Highly flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. Suspected of damaging 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. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response

If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. 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 exposed or concerned: Get medical advice/attention. Call a poison center/doctors if you feel unwell. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish.

Storage

Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

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

None.

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>TOLUENE</td>
<td></td>
<td>108-88-3</td>
<td>30 - &lt; 40</td>
</tr>
<tr>
<td>Heavy Paraffinic Distillate Solvent</td>
<td></td>
<td>64742-04-7</td>
<td>5 - &lt; 10</td>
</tr>
<tr>
<td>Other components below reportable levels</td>
<td></td>
<td></td>
<td>60 - &lt; 70</td>
</tr>
</tbody>
</table>

*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. Get medical attention if irritation develops and persists.

Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed

Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Direct contact with eyes may cause temporary irritation. 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 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.
### 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.

### 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 entry into waterways, sewer, basements or confined areas.

- **Large Spills:** Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. 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.

### Environmental precautions

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. When using do not smoke. 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. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. 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. 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".

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Material name: Royston R28 Mastic
1110 Version #: 04 Revision date: 08-31-2018 Issue date: 08-23-2016 SDS US 3 / 10
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 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

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy Paraffinic Distillate Solvent (CAS 64742-04-7)</td>
<td>PEL</td>
<td>5 mg/m³</td>
<td>Mist.</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>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>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy Paraffinic Distillate Solvent (CAS 64742-04-7)</td>
<td>STEL</td>
<td>10 mg/m³</td>
<td>Mist.</td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>Mist.</td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td>STEL</td>
<td>560 mg/m³</td>
<td>150 ppm</td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td>TWA</td>
<td>375 mg/m³</td>
<td>100 ppm</td>
</tr>
</tbody>
</table>

Biological limit values

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 (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>TOLUENE (CAS 108-88-3)</td>
<td>0.03 mg/l</td>
<td>Toluene</td>
<td>Urine</td>
<td>*</td>
</tr>
<tr>
<td>TOLUENE (CAS 108-88-3)</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

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.

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. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection

Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Wear appropriate chemical resistant gloves.
Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. Chemical respirator with organic vapor cartridge and full facepiece. Wear appropriate thermal protective clothing, when necessary. Observe any medical surveillance requirements. When using do not smoke. 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: Viscous Liquid.
- Color: Black.

Odor: Aromatic Solvent.
Odor threshold: Not available.
pH: Not available.

Melting point/freezing point: -138.82 °F (-94.9 °C) estimated
Initial boiling point and boiling range: 231.08 °F (110.6 °C) estimated

Flash point: 40.0 °F (4.4 °C) estimated
Evaporation rate: Not available.

Flammability (solid, gas): Not applicable.

Upper/lower flammability or explosive limits
- Flammability limit - lower (%): 1.3 % estimated
- Flammability limit - upper (%): 7 % estimated
- Explosive limit - lower (%): 1.4 %
- Explosive limit - upper (%): 7.4 %

Vapor pressure: 37.86 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: 500 °F (260 °C) estimated
Decomposition temperature: Not available.
Viscosity: Not available.

Other information
- Density: 10.40 g/cm3 estimated
- Explosive properties: Not explosive.
- Flammability class: Flammable IB estimated
- Oxidizing properties: Not oxidizing.
- Percent volatile: 35 - 45 %
- Specific gravity: 1.25 estimated
- VOC: 330 g/l

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
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

**Inhalation**
May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.

**Skin contact**
Causes skin irritation.

**Eye contact**
Direct contact with eyes may cause temporary irritation.

**Ingestion**
Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects

**Acute toxicity**
May be fatal if swallowed and enters airways.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TOLUENE (CAS 108-88-3)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Rabbit</td>
<td>12120 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>Rat</td>
<td>2.6 g/kg</td>
</tr>
<tr>
<td>LD50</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Causes skin irritation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Serious eye damage/eye irritation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct contact with eyes may cause temporary irritation.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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**
Risk of cancer cannot be excluded with prolonged exposure.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

- Heavy Paraffinic Distillate Solvent (CAS 64742-04-7) 1 Carcinogenic 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**

- Heavy Paraffinic Distillate Solvent (CAS 64742-04-7) Known To Be Human Carcinogen.

**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**
May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard**
May be fatal if swallowed and enters airways.

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

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.
### Product Test Results

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50 34.075 mg/l, 48 hours estimated</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50 294.1627 mg/l, 96 hours estimated</td>
</tr>
</tbody>
</table>

### Components Test Results

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLUENE (CAS 108-88-3)</td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50 5.46 - 9.83 mg/l, 48 hours</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50 8.11 mg/l, 96 hours</td>
</tr>
</tbody>
</table>

### Persistence and degradability

No data is available on the degradability of any ingredients in the mixture.

### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

<table>
<thead>
<tr>
<th>Material</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLUENE</td>
<td>2.73</td>
</tr>
</tbody>
</table>

### Mobility in soil

No data available.

### Other adverse effects

The product contains volatile organic compounds which have a photochemical ozone creation potential.

### 13. Disposal considerations

#### Disposal instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. If discarded, this product is considered a RCRA ignitable waste, D001. 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

D001: Waste Flammable material with a flash point <140 F

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>UN number</th>
<th>UN1139</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>COATING SOLUTION (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining)</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td>3</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>IB2, T7, TP1, TP8, TP28</td>
</tr>
<tr>
<td>Packaging exceptions</td>
<td>150</td>
</tr>
<tr>
<td>Packaging non bulk</td>
<td>202</td>
</tr>
<tr>
<td>Packaging bulk</td>
<td>242</td>
</tr>
</tbody>
</table>

#### IATA

<table>
<thead>
<tr>
<th>UN number</th>
<th>UN1139</th>
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<tbody>
<tr>
<td>UN proper shipping name</td>
<td>COATING SOLUTION (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining)</td>
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<tr>
<td>Transport hazard class(es)</td>
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<td>Subsidiary risk</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Yes</td>
</tr>
</tbody>
</table>
ERG Code
3H

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

Other information
Passenger and cargo aircraft
Allowed with restrictions.

Cargo aircraft only
Allowed with restrictions.

IMDG
UN number
UN1139

UN proper shipping name
COATING SOLUTION (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining), MARINE POLLUTANT

Transport hazard class(es)
Class
3

Subsidiary risk
-

Packing group
II

Environmental hazards
Marine pollutant
Yes

EmS
F-E, S-E

General information
IMDG Regulated Marine Pollutant.

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)
TOLUENE (CAS 108-88-3) Listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
Classified hazard categories
- Flammable (gases, aerosols, liquids, or solids)
- Skin corrosion or irritation
- Reproductive toxicity
- Specific target organ toxicity (single or repeated exposure)
- Aspiration hazard
- Hazard not otherwise classified (HNOC)

Yes

SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOLUENE</td>
<td>108-88-3</td>
<td>30 - &lt; 40</td>
</tr>
</tbody>
</table>

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
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
California Proposition 65
WARNING: This product can expose you to TOLUENE, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Developmental toxin
TOLUENE (CAS 108-88-3) Listed: January 1, 1991

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))
Heavy Paraffinic Distillate Solvent (CAS 64742-04-7)
TOLUENE (CAS 108-88-3)

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 (NDSDL)</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>Country(s) or region</td>
<td>Inventory name</td>
<td>On inventory (yes/no)*</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>------------------------</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>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</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**
08-23-2016

**Revision date**
08-31-2018

**Version #**
04

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

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

**Disclaimer**
The information offered in this data sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication, however, no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. This material is intended for industrial use only. No warranty, expressed or implied is made.

**Revision information**
This document has undergone significant changes and should be reviewed in its entirety.