# SAFETY DATA SHEET

## 1. Identification

**Product identifier** **HumiSeal 1A33**

**Other means of identification**

**Product code** HumiSeal 1A33

**Recommended use** Protective Coating for Printed Circuit Board

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company name** CHASE CORPORATION Zeta Drive Plant

**Address** 201 Zeta Drive
Pittsburgh, Pennsylvania 15238
United States

**Telephone** 1-866-932-0800

**E-mail** Not available.

**Emergency phone number** 1-800-424-9300 Chemtrec, US
(+1)703-527-3887 Chemtrec, outside of US

## 2. Hazard(s) identification

| | | |
|---|---|---|
| **Physical hazards** | Flammable liquids | Category 2 |
| **Health hazards** | Skin corrosion/irritation | Category 2 |
| | Carcinogenicity | Category 2 |
| | Reproductive toxicity | Category 2 |
| | Specific target organ toxicity, repeated exposure | Category 2 |
| | Aspiration hazard | Category 1 |
| **Environmental hazards** | Hazardous to the aquatic environment, acute hazard | Category 2 |
| | Hazardous to the aquatic environment, long-term hazard | Category 2 |

**OSHA defined hazards** Not classified.

**Label elements**

**Signal word** Danger

**Hazard statement** Highly flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. Suspected of causing cancer. Suspected of damaging the unborn child. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

**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. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. |
| **Response** | 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. Specific treatment (see this label). 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** | Store in a well-ventilated place. Keep cool. 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** | % of the mixture consists of component(s) of unknown acute inhalation toxicity. 5.77% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 5.77% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment. |

## 3. Composition/information on ingredients

**Mixtures**

| Chemical name | Common name and synonyms | CAS number | % |
|---|---|---|---|
| XYLENES | | 1330-20-7 | 30 - < 40 |
| ETHYLBENZENE | | 100-41-4 | 5 - < 10 |
| METHYL ETHYL KETONE | | 78-93-3 | 5 - < 10 |
| TOLUENE | | 108-88-3 | 5 - < 10 |
| Other components below reportable levels | | | 40 - < 50 |

*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. 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. 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. Get medical attention if symptoms occur. |
| **Most important symptoms/effects, acute and delayed** | 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. |

| | |
|---|---|
| **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. Keep out of low areas. 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). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water.<br><br>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. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.<br><br>Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination.<br><br>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. |
| **Environmental precautions** | Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. 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. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Pregnant or breastfeeding women must not handle this product. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Avoid release to the environment. Do not empty into drains.<br><br>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. Avoid spark promoters. Eliminate sources of ignition. 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**

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

| Components | Type | Value |
|---|---|---|
| ETHYLBENZENE (CAS 100-41-4) | PEL | 435 mg/m3 |
| | | 100 ppm |
| METHYL ETHYL KETONE (CAS 78-93-3) | PEL | 590 mg/m3 |
| | | 200 ppm |
| XYLENES (CAS 1330-20-7) | PEL | 435 mg/m3 |
| | | 100 ppm |

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

| Components | Type | Value |
|---|---|---|
| TOLUENE (CAS 108-88-3) | Ceiling | 300 ppm |
| | TWA | 200 ppm |

**US. ACGIH Threshold Limit Values**

| Components | Type | Value |
|---|---|---|
| ETHYLBENZENE (CAS 100-41-4) | TWA | 20 ppm |
| METHYL ETHYL KETONE (CAS 78-93-3) | STEL | 300 ppm |
| | TWA | 200 ppm |
| TOLUENE (CAS 108-88-3) | TWA | 20 ppm |
| XYLENES (CAS 1330-20-7) | STEL | 150 ppm |
| | TWA | 100 ppm |

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

| Components | Type | Value |
|---|---|---|
| ETHYLBENZENE (CAS 100-41-4) | STEL | 545 mg/m3 |
| | | 125 ppm |
| | TWA | 435 mg/m3 |
| | | 100 ppm |
| METHYL ETHYL KETONE (CAS 78-93-3) | STEL | 885 mg/m3 |
| | | 300 ppm |
| | TWA | 590 mg/m3 |
| | | 200 ppm |
| TOLUENE (CAS 108-88-3) | STEL | 560 mg/m3 |
| | | 150 ppm |
| | TWA | 375 mg/m3 |
| | | 100 ppm |

**Biological limit values**

**ACGIH Biological Exposure Indices**

| Components | Value | Determinant | Specimen | Sampling Time |
|---|---|---|---|---|
| ETHYLBENZENE (CAS 100-41-4) | 0.15 g/g | Sum of mandelic acid and phenylglyoxylic acid | Creatinine in urine | * |
| METHYL ETHYL KETONE (CAS 78-93-3) | 2 mg/l | MEK | Urine | * |

**ACGIH Biological Exposure Indices**

| Components | Value | Determinant | Specimen | Sampling Time |
|---|---|---|---|---|
| TOLUENE (CAS 108-88-3) | 0.3 mg/g | o-Cresol, with hydrolysis | Creatinine in urine | * |
| | 0.03 mg/l | Toluene | Urine | * |
| | 0.02 mg/l | Toluene | Blood | * |
| XYLENES (CAS 1330-20-7) | 1.5 g/g | Methylhippuric acids | Creatinine in urine | * |

* - 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. 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.

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

**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.The use of chemical respirator with organic vapor cartridge is recommended.

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

**General hygiene considerations** When using, do not eat, drink or 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** Liquid.

**Color** Clear

**Odor** Aromatic

**Odor threshold** Not available.

**pH** Does not apply.

**Melting point/freezing point** -138.82 °F (-94.9 °C) estimated

**Initial boiling point and boiling range** 175.26 °F (79.59 °C) estimated

**Flash point** 48.2 °F (9.0 °C) Closed Cup

**Evaporation rate** 3.6 BuAc

**Flammability (solid, gas)** Not available.

**Upper/lower flammability or explosive limits**

**Flammability limit - lower (%)** 1 %

**Flammability limit - upper (%)** 7 %

**Explosive limit - lower (%)** Not available.

| | |
|---|---|
| **Explosive limit - upper (%)** | Not available. |
| **Vapor pressure** | 26.35 hPa estimated |
| **Vapor density** | Not available. |
| **Relative density** | Not available. |
| **Solubility(ies)** | |
| **Solubility (water)** | Negligible |
| **Partition coefficient (n-octanol/water)** | Not available. |
| **Auto-ignition temperature** | 759.2 °F (404 °C) estimated |
| **Decomposition temperature** | Not available. |
| **Viscosity** | 160 - 200 cP |
| **Viscosity temperature** | 77 °F (25 °C) |
| **Other information** | |
| **Brookfield viscosity** | 160 - 200 cP |
| **Density** | 0.95 g/cm3 |
| **Flammability class** | Flammable IB estimated |
| **Miscible (water)** | Negligible |
| **Percent volatile** | 54.09 % estimated |
| **Specific gravity** | 0.95 |
| **VOC** | 54.09 % estimated |

## 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 acids. Strong oxidizing agents. Halogens. Ammonia. Amines. Isocyanates. Caustics. |
| **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. |
| **Skin contact** | Causes skin irritation. |
| **Eye contact** | Causes serious eye irritation. |
| **Ingestion** | Expected to be a low ingestion hazard. |
| **Symptoms related to the physical, chemical and toxicological characteristics** | 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.

| Components | Species | Test Results |
|---|---|---|
| ETHYLBENZENE (CAS 100-41-4) | | |
| **Acute** | | |
| **Oral** | | |
| LD50 | Rat | 3500 mg/kg |
| METHYL ETHYL KETONE (CAS 78-93-3) | | |
| **Acute** | | |
| **Oral** | | |
| LD50 | Rat | 2300 - 3500 mg/kg |

| Components | Species | Test Results |
|---|---|---|
| TOLUENE (CAS 108-88-3) | | |
| **Acute** | | |
| **Oral** | | |
| LD50 | Rat | 2.6 g/kg |
| XYLENES (CAS 1330-20-7) | | |
| **Acute** | | |
| **Oral** | | |
| LD50 | Rat | 3523 - 8600 mg/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 available.

**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** Suspected of causing cancer.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

| | |
|---|---|
| ETHYLBENZENE (CAS 100-41-4) | 2B Possibly carcinogenic to humans. |
| TOLUENE (CAS 108-88-3) | 3 Not classifiable as to carcinogenicity to humans. |
| XYLENES (CAS 1330-20-7) | 3 Not classifiable as to carcinogenicity to humans. |

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

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

Not listed.

**Reproductive toxicity** Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals. Suspected of damaging the unborn child.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard** Not available.

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

## 12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

| Product | | Species | Test Results |
|---|---|---|---|
| HumiSeal 1A33 | | | |
| **Aquatic** | | | |
| Crustacea | EC50 | Daphnia | 38.072 mg/l, 48 hours estimated |
| Fish | LC50 | Fish | 109.2146 mg/l, 96 hours estimated |

| Components | | Species | Test Results |
|---|---|---|---|
| ETHYLBENZENE (CAS 100-41-4) | | | |
| **Aquatic** | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 1.37 - 4.4 mg/l, 48 hours |
| Fish | LC50 | Fathead minnow (Pimephales promelas) | 7.5 - 11 mg/l, 96 hours |
| METHYL ETHYL KETONE (CAS 78-93-3) | | | |
| **Aquatic** | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 4025 - 6440 mg/l, 48 hours |

| Components | | Species | Test Results |
|---|---|---|---|
| Fish | LC50 | Sheepshead minnow (Cyprinodon variegatus) | > 400 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 |
| XYLENES (CAS 1330-20-7) | | | |
| **Aquatic** | | | |
| Fish | LC50 | Bluegill (Lepomis macrochirus) | 7.711 - 9.591 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** Not available.

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

| | |
|---|---|
| ETHYLBENZENE | 3.15 |
| METHYL ETHYL KETONE | 0.29 |
| TOLUENE | 2.73 |
| XYLENES | 3.12 - 3.2 |

**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** Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

**DOT**

**UN number** UN1263
**UN proper shipping name** PAINT
**Transport hazard class(es)**
**Class** 3
**Subsidiary risk** -
**Label(s)** 3
**Packing group** II
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.
**Special provisions** 149, B52, IB2, T4, TP1, TP8, TP28
**Packaging exceptions** 150
**Packaging non bulk** 173
**Packaging bulk** 242

**IATA**

**UN number** UN1263
**UN proper shipping name** PAINT
**Transport hazard class(es)**
**Class** 3
**Subsidiary risk** -

| | |
|---|---|
| **Packing group** | II |
| **Environmental hazards** | No. |
| **ERG Code** | 3L |
| **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** | UN1263 |
| **UN proper shipping name** | PAINT |
| **Transport hazard class(es)** | |
| **Class** | 3 |
| **Subsidiary risk** | - |
| **Packing group** | II |
| **Environmental hazards** | |
| **Marine pollutant** | No. |
| **EmS** | F-E, S-E |
| **Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |

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

**DOT**


**IATA; IMDG**


## 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

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

Not regulated.

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

| | |
|---|---|
| ETHYLBENZENE (CAS 100-41-4) | Listed. |
| METHYL ETHYL KETONE (CAS 78-93-3) | Listed. |
| TOLUENE (CAS 108-88-3) | Listed. |
| XYLENES (CAS 1330-20-7) | 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)**

| Chemical name | CAS number | % by wt. |
|---|---|---|
| ETHYLBENZENE | 100-41-4 | 5 - < 10 |
| TOLUENE | 108-88-3 | 5 - < 10 |
| XYLENES | 1330-20-7 | 30 - < 40 |

**Other federal regulations**

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

ETHYLBENZENE (CAS 100-41-4)
TOLUENE (CAS 108-88-3)
XYLENES (CAS 1330-20-7)

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

Not regulated.

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

**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 Proposition 65 - CRT: Listed date/Carcinogenic substance**

| | |
|---|---|
| ETHYLBENZENE (CAS 100-41-4) | Listed: June 11, 2004 |

**US - 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))**

ETHYLBENZENE (CAS 100-41-4)
METHYL ETHYL KETONE (CAS 78-93-3)
TOLUENE (CAS 108-88-3)
XYLENES (CAS 1330-20-7)

**International Inventories**

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|---|---|---|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|---|---|---|
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*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** | 10-21-2014 |
| **Revision date** | 01-25-2018 |
| **Version #** | 07 |
| **HMIS® ratings** | Health: 3*<br>Flammability: 3<br>Physical hazard: 0 |
| **NFPA ratings** | Health: 2<br>Flammability: 3<br>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** | Exposure controls/personal protection: Respiratory protection |