



SAFETY DATA SHEET

1. Identification

Product number 1000002458
Product identifier **CAMIE 390B CONTACT CEMENT**
Company information Camie-Campbell, Inc.
 1005 S. Westgate Drive
 Addison, IL 60101 United States
 www.camie.com
Company phone General Assistance 1-800-325-9572
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 01
Recommended use CONTACT CEMENT ADHESIVE BULK
Recommended restrictions None known.

2. Hazard(s) identification

| | | |
|------------------------------|--|-----------------------------|
| Physical hazards | Flammable aerosols | Category 1 |
| Health hazards | Acute toxicity, inhalation | Category 2 |
| | Skin corrosion/irritation | Category 2 |
| | Serious eye damage/eye irritation | Category 2A |
| | Sensitization, skin | Category 1 |
| | Carcinogenicity | Category 1B |
| | Reproductive toxicity | Category 1A |
| | Specific target organ toxicity, single exposure | Category 3 narcotic effects |
| | 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. May be fatal if swallowed and enters airways. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause drowsiness or dizziness. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

Precautionary statement

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

| | |
|--|--|
| Response | If swallowed: Immediately call a poison center/doctor. 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). Do NOT induce vomiting. If skin irritation or rash 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. Eliminate all ignition sources if safe to do so. |
| Storage | Store in a well-ventilated place. Keep container tightly closed. 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) | None known. |
| Supplemental information | None. |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|---|--|------------|----------|
| Acetone | | 67-64-1 | 10 - 20 |
| Methyl Ethyl Ketone | | 78-93-3 | 10 - 20 |
| n-Hexane | | 110-54-3 | 10 - 20 |
| Toluene | | 108-88-3 | 10 - 20 |
| 2-Methylpentane | | 107-83-5 | 2.5 - 10 |
| 3-Methylpentane | | 96-14-0 | 2.5 - 10 |
| 2,2-Dimethylbutane | | 75-83-2 | 1 - 2.5 |
| 2,3-Dimethylbutane | | 79-29-8 | 1 - 2.5 |
| 2,2'-methylene Bis(4-methyl-6-tert-butylphenol) | 2,2'-METHYLEN-BIS-(6-TERT.-BUTYL-4-ME THYL-PHENOL) | 119-47-1 | 0.1 - 1 |
| Rosin | | 8050-09-7 | 0.1 - 1 |
| Zinc Oxide | | 1314-13-2 | 0.1 - 1 |
| Other components below reportable levels | | | 10 - 20 |

*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. Wash off with soap and plenty of water. If skin irritation or rash occurs: Get medical advice/attention. For minor skin contact, avoid spreading material on unaffected skin. |
| 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 | 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. Aspiration may cause pulmonary edema and pneumonitis. |
| Most important symptoms/effects, acute and delayed | Irritation of eyes and mucous membranes. May cause allergic skin reaction. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Prolonged exposure may cause chronic effects. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. |
| General information | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. IF exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse. |

5. Fire-fighting measures

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|-------------------------------------|--|
| Suitable extinguishing media | Alcohol resistant foam. Water fog. Carbon dioxide (CO ₂). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. |
|-------------------------------------|--|

| | |
|--|---|
| Unsuitable extinguishing media | Water. Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | 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. By heating and fire, harmful vapors/gases may be formed. Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. |
| Special protective equipment and precautions for firefighters | Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. |
| Fire-fighting equipment/instructions | In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. 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. Move container from fire area if it can be done without risk. In the event of fire and/or explosion do not breathe fumes. |
| 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 personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. 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. 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. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills in 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. Vapors may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. 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 the mist or vapor. Avoid contact with skin. Avoid contact with eyes. Avoid contact during pregnancy/while nursing. Avoid prolonged exposure. Provide adequate ventilation. Use personal protective equipment as required. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Do not empty into drains.

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

Level 3 Aerosol.
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 original tightly closed container. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Refrigeration recommended. 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 | Form |
|-----------------------------------|------|--------------------------------|--|
| Acetone (CAS 67-64-1) | PEL | 2400 mg/m3 1000 ppm | |
| Methyl Ethyl Ketone (CAS 78-93-3) | PEL | 590 mg/m3 200 ppm | |
| n-Hexane (CAS 110-54-3) | PEL | 1800 mg/m3 500 ppm | |
| Zinc Oxide (CAS 1314-13-2) | PEL | 5 mg/m3 5 mg/m3 15 mg/m3 | Respirable fraction. Fume. Total dust. |

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 | Form |
|----------------------------------|------|----------|------|
| 2,2-Dimethylbutane (CAS 75-83-2) | STEL | 1000 ppm | |
| | TWA | 500 ppm | |
| 2,3-Dimethylbutane (CAS 79-29-8) | STEL | 1000 ppm | |
| | TWA | 500 ppm | |
| 2-Methylpentane (CAS 107-83-5) | STEL | 1000 ppm | |
| | TWA | 500 ppm | |
| 3-Methylpentane (CAS 96-14-0) | STEL | 1000 ppm | |
| | TWA | 500 ppm | |

US. ACGIH Threshold Limit Values

| Components | Type | Value | Form |
|-----------------------------------|------|----------|----------------------|
| Acetone (CAS 67-64-1) | TWA | 500 ppm | |
| | STEL | 750 ppm | |
| Methyl Ethyl Ketone (CAS 78-93-3) | TWA | 500 ppm | |
| | STEL | 300 ppm | |
| n-Hexane (CAS 110-54-3) | TWA | 200 ppm | |
| Toluene (CAS 108-88-3) | TWA | 50 ppm | |
| Zinc Oxide (CAS 1314-13-2) | TWA | 20 ppm | |
| | STEL | 10 mg/m3 | Respirable fraction. |
| | TWA | 2 mg/m3 | Respirable fraction. |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value | Form |
|-----------------------------------|---------|-----------|-------|
| Acetone (CAS 67-64-1) | TWA | 590 mg/m3 | |
| | | 250 ppm | |
| Methyl Ethyl Ketone (CAS 78-93-3) | STEL | 885 mg/m3 | |
| | | 300 ppm | |
| n-Hexane (CAS 110-54-3) | TWA | 590 mg/m3 | |
| | | 200 ppm | |
| Toluene (CAS 108-88-3) | TWA | 180 mg/m3 | |
| | | 50 ppm | |
| Zinc Oxide (CAS 1314-13-2) | STEL | 560 mg/m3 | |
| | | 150 ppm | |
| Zinc Oxide (CAS 1314-13-2) | TWA | 375 mg/m3 | |
| | Ceiling | 100 ppm | Dust. |
| | STEL | 15 mg/m3 | Fume. |
| | TWA | 5 mg/m3 | Dust. |
| | TWA | 5 mg/m3 | Fume. |

Biological limit values**ACGIH Biological Exposure Indices**

| Components | Value | Determinant | Specimen | Sampling Time |
|-----------------------------------|-----------|---|------------------------|---------------|
| Acetone (CAS 67-64-1) | 50 mg/l | Acetone | Urine | * |
| Methyl Ethyl Ketone (CAS 78-93-3) | 2 mg/l | MEK | Urine | * |
| n-Hexane (CAS 110-54-3) | 0.4 mg/l | 2,5-Hexanedio n, without hydrolysis | Urine | * |
| 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 | * |

* - 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. Provide eyewash station.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear eye/face protection. Wear safety glasses with side shields (or goggles).

| | |
|---------------------------------------|--|
| Hand protection | Wear protective gloves. |
| Skin protection | |
| Other | Wear appropriate chemical resistant clothing. |
| Respiratory protection | In case of insufficient ventilation, wear suitable respiratory equipment. |
| 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. Contaminated work clothing should not be allowed out of the workplace. |

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 | Not available. |
| Initial boiling point and boiling range | 221.44 °F (105.24 °C) estimated |
| Flash point | 65.5 °F (18.6 °C) estimated |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | 7.7 % estimated |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | 146.62 psig @70F estimated |
| Vapor density | Not available. |
| Relative density | 0.641 g/cm3 estimated |
| Solubility(ies) | |
| Solubility (water) | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | 496.4 °F (258 °C) estimated |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Density | 0.64 g/cm3 estimated |
| Flammability class | Flammable IB estimated |
| Heat of combustion | 34.66 kJ/g estimated |
| Heat of combustion (NFPA 30B) | 34.66 kJ/g estimated |
| Percent volatile | 61.31 % estimated |
| Specific gravity | 0.641 estimated |
| VOC (Weight %) | 44.12 % 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 | Heat, flames and sparks. Avoid temperatures exceeding the flash point. |
| Incompatible materials | Strong oxidizing agents. Ammonia. Amines. Isocyanates. Caustics. |
| Hazardous decomposition products | No hazardous decomposition products are known. |

11. Toxicological information

Information on likely routes of exposure

| | |
|-------------------|---|
| Ingestion | May be fatal if swallowed and enters airways. |
| Inhalation | May be fatal if swallowed and enters airways. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Prolonged inhalation may be harmful. May cause damage to organs by inhalation. |

2,2'-methylene Bis(4-methyl-6-tert-butylphenol) < 100 mg/m3 Acute LC50 Estimated
Species: Rat

Skin contact Causes skin irritation. May cause an allergic skin reaction.
2,2'-methylene Bis(4-methyl-6-tert-butylphenol) Acute LD50
Species: Rat

Eye contact Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Irritant effects.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways. Narcotic effects. May cause allergic skin reaction.
2,2'-methylene Bis(4-methyl-6-tert-butylphenol) > 5000 mg/kg Oral LD50 Estimated
Species: Rat

| Components | Species | Test Results |
|--|------------|--|
| 2,2'-methylene Bis(4-methyl-6-tert-butylphenol) (CAS 119-47-1) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 10000 mg/kg, 24 Hours |
| Acetone (CAS 67-64-1) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Guinea pig | > 7426 mg/kg, 24 Hours > 9.4 ml/kg, 24 Hours |
| | Rabbit | > 7426 mg/kg, 24 Hours > 9.4 ml/kg, 24 Hours |
| <i>Inhalation</i> | | |
| LC50 | Rat | 55700 ppm, 3 Hours 132 mg/l, 3 Hours 50.1 mg/l |
| <i>Oral</i> | | |
| LD50 | Rat | 5800 mg/kg 2.2 ml/kg |
| Methyl Ethyl Ketone (CAS 78-93-3) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 10 ml/kg, 24 Hours |

| Components | Species | Test Results |
|----------------------------|------------|--|
| <i>Oral</i> LD50 | Rat | 2054 mg/kg |
| n-Hexane (CAS 110-54-3) | | |
| Acute | | |
| <i>Dermal</i> LD50 | Rabbit | > 2000 mg/kg, 4 Hours > 5 ml/kg, 4 Hours |
| <i>Inhalation</i> LC50 | Rat | > 5000 ppm, 24 Hours > 31.86 mg/l 73860 ppm, 4 Hours |
| <i>Oral</i> LD50 | Rat | 24 ml/kg 24 g/kg |
| | Wistar rat | 49 g/kg |
| Rosin (CAS 8050-09-7) | | |
| Acute | | |
| <i>Dermal</i> LD50 | Rat | > 2000 mg/kg, 24 Hours |
| <i>Oral</i> LD50 | Rat | 1000 - 2000 mg/kg |
| Toluene (CAS 108-88-3) | | |
| Acute | | |
| <i>Dermal</i> LD50 | Rabbit | > 5000 mg/kg, 24 Hours |
| <i>Inhalation</i> LC50 | Mouse | 6405 - 7436 ppm, 6 Hours 5320 ppm, 8 Hours |
| | Rat | 5879 - 6281 ppm, 6 Hours 12.5 - 28.8 mg/l, 4 Hours |
| <i>Oral</i> LD50 | Rat | 5000 mg/kg |
| Zinc Oxide (CAS 1314-13-2) | | |
| Acute | | |
| <i>Inhalation</i> LC50 | Rat | > 5700 mg/m3 |
| <i>Oral</i> LD50 | Mouse | 2000 - 5000 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 | May cause an allergic skin reaction. |
| 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

Toluene (CAS 108-88-3)

3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

| | |
|---|---|
| Reproductive toxicity | May damage fertility or the unborn child. |
| Specific target organ toxicity - single exposure | Narcotic effects. |
| Specific target organ toxicity - repeated exposure | Respiratory system. Skin. Kidneys. Central nervous system. Eyes. Liver. Peripheral nervous system. May cause damage to organs through prolonged or repeated exposure. |
| Aspiration hazard | May be fatal if swallowed and enters airways. |
| Chronic effects | Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. May cause 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.

| Components | Species | Test Results |
|-----------------------------------|---------|---|
| Acetone (CAS 67-64-1) | | |
| Aquatic | | |
| Crustacea | EC50 | Water flea (Daphnia magna) 21.6 - 23.9 mg/l, 48 hours |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) 4740 - 6330 mg/l, 96 hours |
| Methyl Ethyl Ketone (CAS 78-93-3) | | |
| Aquatic | | |
| Crustacea | EC50 | Daphnia 520.0001 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 | | |
| Algae | IC50 | Algae 433.0001 mg/L, 72 Hours |
| Crustacea | EC50 | Daphnia 7.645 mg/L, 48 Hours |
| Fish | LC50 | Water flea (Daphnia magna) 5.46 - 9.83 mg/l, 48 hours Coho salmon,silver salmon (Oncorhynchus kisutch) 8.11 mg/l, 96 hours |
| Zinc Oxide (CAS 1314-13-2) | | |
| Aquatic | | |
| Fish | LC50 | Fathead minnow (Pimephales promelas) 2246 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** No data available.**Partition coefficient n-octanol / water (log Kow)**

| | |
|---|-------|
| 2,2-Dimethylbutane | 3.82 |
| 2,2'-methylene Bis(4-methyl-6-tert-butylphenol) | 6.25 |
| 2,3-Dimethylbutane | 3.42 |
| 2-Methylpentane | 3.74 |
| 3-Methylpentane | 3.6 |
| Acetone | -0.24 |
| Methyl Ethyl Ketone | 0.29 |
| n-Hexane | 3.9 |
| Toluene | 2.73 |

Mobility in soil No data available.

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

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. 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.

US RCRA Hazardous Waste U List: Reference

| | |
|-----------------------------------|------|
| Acetone (CAS 67-64-1) | U002 |
| Methyl Ethyl Ketone (CAS 78-93-3) | U159 |
| Toluene (CAS 108-88-3) | U220 |

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 | UN1133 |
| UN proper shipping name | Adhesives |
| Transport hazard class(es) | |
| Class | 3 |
| Subsidiary risk | - |
| Label(s) | 2.1 |
| Packing group | III |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling. |
| Special provisions | B1, B52, IB3, T2, TP1 |
| Packaging exceptions | 150 |
| Packaging non bulk | 173 |
| Packaging bulk | 242 |

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

IATA

| | |
|-------------------------------------|---|
| UN number | UN1133 |
| UN proper shipping name | Adhesives |
| Transport hazard class(es) | |
| Class | 3 |
| Subsidiary risk | - |
| Label(s) | 3 |
| Packing group | III |
| Environmental hazards | Yes |
| ERG Code | 3L |
| Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling. |
| Other information | |
| Passenger and cargo aircraft | Allowed. |
| Cargo aircraft only | Allowed. |
| Packaging Exceptions | LTD QTY |

IMDG

| | |
|--------------------------------|-----------|
| UN number | UN1133 |
| UN proper shipping name | ADHESIVES |

Transport hazard class(es)

Class 3

Subsidiary risk -

Label(s) 3

Packing group III

Environmental hazards

Marine pollutant Yes

EmS F-E, S-D

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

Packaging Exceptions LTD QTY

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

DOT



IATA; IMDG



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)

Acetone (CAS 67-64-1) Listed.

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 listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance

| Chemical name | CAS number | Reportable quantity | Threshold planning quantity | Threshold planning quantity, lower value | Threshold planning quantity, upper value |
|----------------|------------|---------------------|-----------------------------|--|--|
| Ethylene Oxide | 75-21-8 | 10 | 1000 lbs | | |
| Formaldehyde | 50-00-0 | 100 | 500 lbs | | |

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

| Chemical name | CAS number | % by wt. |
|------------------------|------------|------------|
| n-Hexane | 110-54-3 | 10 - 20 |
| Toluene | 108-88-3 | 10 - 20 |
| Xylene | 1330-20-7 | 0.1 - 1 |
| 1,4-Dioxane | 123-91-1 | 0.01 - 0.1 |
| 2-chlorobuta-1,3-diene | 126-99-8 | 0.01 - 0.1 |
| Ethyl Benzene | 100-41-4 | 0.01 - 0.1 |
| Ethylene Oxide | 75-21-8 | 0.01 - 0.1 |
| Formaldehyde | 50-00-0 | 0.01 - 0.1 |

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) Not regulated.

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

Acetone (CAS 67-64-1) 6532
 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))

Acetone (CAS 67-64-1) 35 %WV
 Methyl Ethyl Ketone (CAS 78-93-3) 35 %WV
 Toluene (CAS 108-88-3) 35 %WV

DEA Exempt Chemical Mixtures Code Number

Acetone (CAS 67-64-1) 6532
 Methyl Ethyl Ketone (CAS 78-93-3) 6714
 Toluene (CAS 108-88-3) 594

US state regulations**US. Massachusetts RTK - Substance List**

2,2-Dimethylbutane (CAS 75-83-2)
 2,3-Dimethylbutane (CAS 79-29-8)
 2-Methylpentane (CAS 107-83-5)
 3-Methylpentane (CAS 96-14-0)
 Acetone (CAS 67-64-1)
 Methyl Ethyl Ketone (CAS 78-93-3)
 n-Hexane (CAS 110-54-3)
 Toluene (CAS 108-88-3)
 Zinc Oxide (CAS 1314-13-2)

US. New Jersey Worker and Community Right-to-Know Act

2,2-Dimethylbutane (CAS 75-83-2)

2,3-Dimethylbutane (CAS 79-29-8)
 2-Methylpentane (CAS 107-83-5)
 Acetone (CAS 67-64-1)
 Methyl Ethyl Ketone (CAS 78-93-3)
 n-Hexane (CAS 110-54-3)
 Toluene (CAS 108-88-3)
 Zinc Oxide (CAS 1314-13-2)

US. Pennsylvania Worker and Community Right-to-Know Law

2,2-Dimethylbutane (CAS 75-83-2)
 2,3-Dimethylbutane (CAS 79-29-8)
 2-Methylpentane (CAS 107-83-5)
 3-Methylpentane (CAS 96-14-0)
 Acetone (CAS 67-64-1)
 Methyl Ethyl Ketone (CAS 78-93-3)
 n-Hexane (CAS 110-54-3)
 Toluene (CAS 108-88-3)
 Zinc Oxide (CAS 1314-13-2)

US. Rhode Island RTK

Acetone (CAS 67-64-1)
 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 cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

| | |
|---------------------------------------|-------------------------|
| 1,4-Dioxane (CAS 123-91-1) | Listed: January 1, 1988 |
| 2-chlorobuta-1,3-diene (CAS 126-99-8) | Listed: June 2, 2000 |
| 4-vinylcyclohexene (CAS 100-40-3) | Listed: May 1, 1996 |
| Ethyl Benzene (CAS 100-41-4) | Listed: June 11, 2004 |
| Ethylene Oxide (CAS 75-21-8) | Listed: July 1, 1987 |
| Formaldehyde (CAS 50-00-0) | Listed: January 1, 1988 |

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

| | |
|------------------------------|-------------------------|
| Ethylene Oxide (CAS 75-21-8) | Listed: August 7, 2009 |
| Toluene (CAS 108-88-3) | Listed: January 1, 1991 |

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

| | |
|-----------------------------------|---------------------------|
| 4-vinylcyclohexene (CAS 100-40-3) | Listed: August 7, 2009 |
| Ethylene Oxide (CAS 75-21-8) | Listed: February 27, 1987 |
| Toluene (CAS 108-88-3) | Listed: August 7, 2009 |

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

| | |
|------------------------------|------------------------|
| Ethylene Oxide (CAS 75-21-8) | Listed: August 7, 2009 |
|------------------------------|------------------------|

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|-------------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | No |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | No |
| 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) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | No |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| 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 03-30-2015

Version # 01

Disclaimer The information in the sheet was written based on the best knowledge and experience currently available. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 process, unless specified in the text.