

SAFETY DATA SHEET

1. Identification

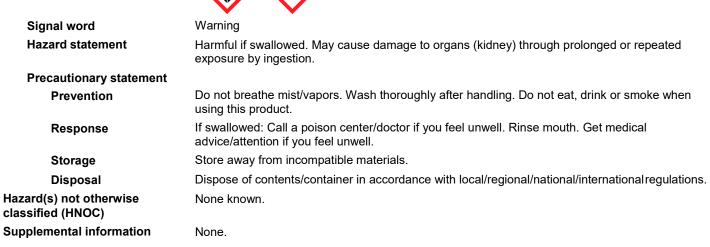
| Product identifier | #1150 Red |
|-------------------------------|------------------|
| Other means of identification | None. |
| Recommended use | Coding & Marking |
| Recommended restrictions | None known. |

Manufacturer/Importer/Supplier/Distributor information

| Company name Address | PANNIER CORPORATION 207 Sandusky Street Pittsburgh, PA 15212-5823 |
|-------------------------|---|
| Telephone | (412) 323-4900 |
| Contact person | sales@pannier.com |
| Emergency phone number | INFOTRAC: 1-800-535-5053 (North America) |

2. Hazard(s) identification

| Label elements | | |
|----------------------|--|---------------------|
| OSHA defined hazards | Not classified. | |
| | Specific target organ toxicity, repeated exposure (oral) | Category 2 (kidney) |
| Health hazards | Acute toxicity, oral | Category 4 |
| Physical hazards | Not classified. | |



3. Composition/information on ingredients

Mixtures

| Chemical name | CAS number | % |
|----------------------|---|-------|
| Diethylene glycol | 111-46-6 | 94-97 |
| Composition comments | All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. Components not listed are either non-hazardous or are below reportable limits. | |

4. First-aid measures

| Inhalation | Move to fresh air. Call a physician if symptoms develop or persist. | |
|--|--|--|
| Skin contact | Wash off with soap and water. Get medical attention if irritation develops and persists. | |
| Eye contact | Rinse with water. Get medical attention if irritation develops and persists. | |
| Ingestion | Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell. | |
| Most important symptoms/effects, acute and delayed | Prolonged exposure may cause chronic effects. | |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed. | |
| General information | 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. | |

5. Fire-fighting measures

| Suitable extinguishing media | Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2). |
|--|---|
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | During fire, gases hazardous to health may be formed. Carbon oxides. |
| Special protective equipment and precautions for firefighters | Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Firefighting equipment/instructions | 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 | Will burn if involved in a fire. Heat may cause the containers to explode. |

6. Accidental release measures

| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. | |
|---|--|--|
| Methods and materials for | This product is miscible in water. | |
| containment and cleaning up | Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. 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 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. | |
| 7. Handling and storage | | |
| Precautions for safe handling | Avoid forming spray/aerosol mists. Do not breathe mist or vapor. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. | |
| Conditions for safe storage, including any incompatibilities | Store in a closed container away from incompatible materials. Store between 35°F (2°C) and 120°F (49°C). Store away from incompatible materials (see Section 10 of the SDS). | |

8. Exposure controls/personal protection

Occupational exposure limits

| Components | Туре | Value | |
|-------------------------------------|---|---|--|
| Diethylene glycol (CAS 111-46-6) | TWA | 10 mg/m3 | |
| Biological limit values | No biological exposure limits noted for | or the ingredient(s). | |
| Appropriate engineering controls | Good general ventilation 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. | | |
| ndividual protection measures | s, such as personal protective equipm | nent | |
| Eye/face protection | Wear approved safety goggles. Wea | Wear approved safety goggles. Wear face shield if there is risk of splashes. | |
| Skin protection | | | |
| Hand protection | Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. | | |
| Skin protection | | | |
| Other | Wear suitable protective clothing. Use of an impervious apron is recommended. | | |
| Respiratory protection | Minimize inhalation of aerosols/mists: In case of inadequate ventilation use suitable respirator Chemical respirator with organic vapor cartridge and full facepiece. Seek advice from local supervisor. | | |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. | | |
| General hygiene considerations | | ays observe good personal hygiene measures, such as and before eating, drinking, and/or smoking. Routinely wash ent to remove contaminants. | |

9. Physical and chemical properties

| Appearance | | |
|--|---------------------------------|--|
| Physical state | Liquid. | |
| Form | Liquid. | |
| Color | Various. | |
| Odor | Characteristic. | |
| Odor threshold | Not available. | |
| рН | 7 (20°C/68°F) | |
| Melting point/freezing point | Not available. | |
| Initial boiling point and boiling range | 473°F (245°C) | |
| Flash point | 294.8°F (146.0°C) | |
| Evaporation rate | Not available. | |
| Flammability (solid, gas) | Not applicable. | |
| Upper/lower flammability or explosive limits | | |
| Flammability limit - lower (%) | 0.7% v/v | |
| Flammability limit - upper (%) | 22% v/v | |
| Vapor pressure | 0 hPa (20°C/68°F) | |
| Vapor density | Not available. | |
| Relative density | Not available. | |
| Solubility(ies) | | |
| Solubility (water) | Completely miscible with water. | |
| Partition coefficient (n-octanol/water) | Not available. | |
| Auto-ignition temperature | Not applicable. | |

| Decomposition temperature | Not available. |
|---------------------------|------------------------------------|
| Viscosity | Not available. |
| Other information | |
| Density | 1.13 g/cm ³ (20°C/68°F) |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| | |

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 notoccur. |
| Conditions to avoid | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials. |
| Incompatible materials | Strong oxidizing agents. Strong acids. Strong bases. Alkali metals. Halogenated compounds. |
| Hazardous decomposition products | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. |

11. Toxicological information

| Information on likely routes of exposure | | | |
|--|--|--------------|--|
| Inhalation | Prolonged inhalation may be harmful. | | |
| Skin contact | Prolonged skin contact may cause temporary irrita | ation. | |
| Eye contact | Direct contact with eyes may cause temporary irrit | ation. | |
| Ingestion | Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure by ingestion. | | |
| Symptoms related to the physical, chemical and toxicological characteristics | Direct contact with eyes may cause temporary irritation. | | |
| Information on toxicological effe | ects | | |
| Acute toxicity | Harmful if swallowed. | | |
| Components | Species | Test Results | |
| Diethylene glycol (CAS 111-46-6) | | | |
| <u>Acute</u> | | | |
| Dermal | | | |
| LD50 | Rabbit | 11890 mg/kg | |
| Skin corrosion/irritation | Prolonged skin contact may cause temporary irrita | ition. | |
| Serious eye damage/eye irritation | Direct contact with eyes may cause temporary irritation. | | |
| Respiratory or skin sensitization | 1 | | |
| 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 | Not classifiable as to carcinogenicity to humans. | | |
| IARC Monographs. Overall Evaluation of Carcinogenicity | | | |
| Not listed. NTP Report on Carcinogens | 3 | | |
| Not listed. | | | |
| | d Substances (29 CFR 1910.1001-1053) | | |
| Not regulated. Reproductive toxicity | This product is not evenented to cause reproductive or developmental effects | | |
| • | This product is not expected to cause reproductive or developmental effects. | | |
| Specific target organ toxicity - single exposure | Not classified. | | |
| | | | |

| Specific target organ toxicity - repeated exposure | May cause damage to organs (kidney) through prolonged or repeated exposure by ingestion. |
|--|--|
| Aspiration hazard | Not an aspiration hazard. |
| Chronic effects | Prolonged inhalation may be harmful. May cause damage to organs through prolonged or repeated exposure. |
| 12. Ecological information | |
| Ecotoxicity | The product components are 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. |
| Persistence and degradability | No data is available on the degradability of this product. |
| Bioaccumulative potential | No data available on bioaccumulation. |
| Mobility in soil | This product is water soluble and may disperse in soil. |
| Other adverse effects | None known. |

13. Disposal considerations

| Disposal instructions | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. | |
|--|--|--|
| Local disposal regulations | Dispose in accordance with all applicable regulations. | |
| Hazardous waste code | The waste code should be assigned in discussion between the user, the producer and the waste disposal company. | |
| Waste from residues / unused products | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). | |
| 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

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

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, Sub pt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Toxic Substances Control All components of the mixture on the TSCA 8(b) inventory are designated "active".

Act (TSCA)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes chemical

| Classified hazard categories | Acute toxicity (any route of exposure) Specific target organ toxicity (single or repeated exposure) | |
|---|--|--|
| SARA 313 (TRI reporting) Not regulated. | | |
| Other federal regulations | | |
| Clean Air Act (CAA) Section | 112 Hazardous Air Pollutants (HAPs) List | |
| Not regulated. | | |
| Clean Air Act (CAA) Section | 112(r) Accidental Release Prevention (40 CFR 68.130) | |
| Not regulated. | | |
| Safe Drinking Water Act (SDWA) | Not regulated. | |
| US state regulations | | |
| US. Massachusetts RTK - Substance List | | |
| Not regulated. | | |
| US. New Jersey Worker and Community Right-to-Know Act | | |
| Not listed. | | |
| US. Pennsylvania Worker ar | nd Community Right-to-Know Law | |
| Diethylene glycol (CAS 1 | 11-46-6) | |
| US. Rhode Island RTK | | |
| Diethylene glycol (CAS 1 | 11-46-6) | |
| California Proposition 65 | | |

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

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) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| Taiwan | Taiwan Chemical Substance Inventory (TCSI) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |
| *A "Yes" indicates this product co | mplies with the inventory requirements administered by the governing country(s). | |

*A "Yes" indicates this product complies 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 | 05-December-2018 |
|---------------|---|
| Revision date | - |
| Version # | 01 |
| HMIS® ratings | Health: 2* Flammability: 1 Physical hazard: 0 |
| NFPA ratings | |

Pannier Corp. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.