1. Identification

Product identifier  #1150 Blue Ink
Other means of identification  None.
Recommended use  Coding & Marking
Recommended restrictions  None known.

Manufacturer/Importer/Supplier/Distributor information

Company name  Universal Stenciling & Marking Systems, Inc.
Address  205 15th Avenue S.E.
          Saint Petersburg, FL 33701
Telephone  (727) 894-3027
Contact person  Customer Service
Emergency phone number  Chemtrec: 800-424-9300 (US only)
                        +1-703-527-3887 international

2. Hazard(s) identification

Physical hazards  Not classified.
Health hazards
Acute toxicity, oral  Category 4
Serious eye damage/eye irritation  Category 2B
Specific target organ toxicity, repeated exposure  Category 2 (Kidney)

OSHA defined hazards  Not classified.

Label elements

Signal word  Warning
Hazard statement  Harmful if swallowed. Causes eye irritation. May cause damage to organs (Kidney) through prolonged or repeated exposure.
Precautionary statement
Prevention  Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe mist or vapor.
Response  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. Get medical advice/attention if you feel unwell.
Storage  Store away from incompatible materials.
Disposal  Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol</td>
<td>111-46-6</td>
<td>94-97</td>
</tr>
</tbody>
</table>

Composition comments  All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
4. First-aid measures

**Inhalation**
Move to fresh air. If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

**Skin contact**
Wash off immediately with soap and plenty of water. Take off contaminated clothing and wash before reuse. Get medical attention if irritation develops and persists.

**Eye contact**
Flush eyes immediately with large amounts of water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion**
Never give anything by mouth to a victim who is unconscious or is having convulsions. Rinse mouth thoroughly. Only induce vomiting at the instruction of medical personnel. Get medical attention.

**Most important symptoms/effects, acute and delayed**
May cause eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause mild skin irritation.

**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. 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.

**Fire fighting 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**
No unusual fire or explosion hazards noted. 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 or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. Avoid contact with skin and eyes. Wear suitable protective clothing, gloves and eye/face protection.

**Methods and materials for containment and cleaning up**
This product is miscible in water.

**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. 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. Prevent from entering into soil, ditches, sanitary sewers, waterways and/or groundwater.

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. Observe good industrial hygiene practices. Provide adequate ventilation. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wear suitable protective clothing and gloves.

**Conditions for safe storage, including any incompatibilities**
Store in a closed container away from incompatible materials. Store away from incompatible materials (see Section 10 of the SDS). Store between 35°F (2°C) and 120°F (49°C).
8. Exposure controls/personal protection

Occupational exposure limits

US. Workplace Environmental Exposure Level (WEEL) Guides

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol (CAS 111-46-6)</td>
<td>TWA</td>
<td>10 mg/m3</td>
</tr>
</tbody>
</table>

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

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.

Individual protection measures, such as personal protective equipment

Eye/face protection

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.

Other

Wear suitable protective clothing and gloves.

Respiratory protection

Chemical respirator with organic vapor cartridge and full facepiece. Minimise inhalation of aerosols/mists: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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

Colored liquid.

Physical state

Liquid.

Form

Liquid.

Color

Various.

Odor

Characteristic.

Odor threshold

Not available.

pH

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

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.

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/cm³ (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 not occur.

Conditions to avoid: Contact with incompatible materials.


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: May cause damage to organs through prolonged or repeated exposure by inhalation. Prolonged inhalation may be harmful.
- Skin contact: May cause mild skin irritation.
- Eye contact: Causes eye irritation.
- Ingestion: Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics:
- Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Edema. Prolonged contact may cause redness, irritation and dry skin.

Information on toxicological effects:
- Acute toxicity: Harmful if swallowed.
- Skin corrosion/irritation: Causes mild skin irritation.
- Serious eye damage/eye irritation: Causes eye irritation.

Respiratory or skin sensitization:
- Respiratory sensitization: Not a respiratory sensitizer.
- Skin sensitization: This product is not expected to cause skin sensitization.

Germ cell mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.


Reproductive toxicity: 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.

Aspiration hazard: No data available.

Chronic effects: May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

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 available.
Bioaccumulative potential  No data available.
Mobility in soil  This product is water soluble and may disperse in soil.
Other adverse effects  None known.

13. Disposal considerations
Disposal instructions  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.
IATA  Not regulated as dangerous goods.
IMDG  Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code  Not established.

15. Regulatory information
US federal regulations  This product is hazardous according to OSHA 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.
CERCLA/SARA Hazardous Substances - Not applicable.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)  Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)  Not listed.
Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories  Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No
SARA 302 Extremely hazardous substance  Not listed.
SARA 311/312 Hazardous chemical  Yes
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 and Community Right-to-Know Law
Diethylene glycol (CAS 111-46-6)

US. Rhode Island RTK
Not regulated.

US. 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.

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>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
</tbody>
</table>

*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 30-June-2015
Revision date 21-July-2015
Version # 02

Further information
HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings
Health: 2*
Flammability: 1
Physical hazard: 0

NFPA ratings

Disclaimer
Universal Stenciling & Marking Systems, Inc. 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.