1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY UNDERTAKING

GHS Product Identifier

Product Name: M2 / M5 / M15 Permanent Marker

Other means of identification

Product Code(s): M2: #10560 Black, #10560H Black, #10561 Red, #10561H Red
M5: #10550 Black, #10551 Red
M15: #11501 Black, #11502 Blue, #11504 Red

Recommended use of the chemical and restrictions on use

Recommended Use: Solvent based marker
Uses advised against: Do not use on skin. Keep away from children.

Supplier’s Details

Supplier’s Address:
U-Mark, Inc.
102 Iowa Ave.
Belleville, IL 62220
Tel: 618-235-7500

Emergency Telephone Number

Chemical Emergency Phone Number:
24-hour Emergency Phone: Infotrac 1-800-535-5053 (USA and Canada), +1-352-323-3500 (International)

2. HAZARDS IDENTIFICATION

Classification

This product is an article as defined by the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200). No exposure to hazardous chemicals is expected to occur during intended product use. Misuse of the product may result in exposure to hazardous chemicals. The classification below applies to the liquid ink in this marker.

This product is not a toxic or hazardous substances as defined by 16 CRF 1500.3 of the Federal Hazardous Substances Act (FHSA) and as such does not require acute or chronic hazard labeling. Reviews were conducted using guidelines set forth by the CPSC (Consumer Product Safety Commission). Inks are certified as compliant under ASTM D-4236

Emergency Overview

GHS Label elements, including precautionary statements

The product contains no substance which at their given concentration are considered to be hazardous to health. Keep out of reach of children.

Precautionary Statements

Prevention
• None

General Advice
• None

Storage
• None

Disposal
• None

Hazard Not Otherwise Classified (HNOC) Not applicable

Other Information No information available
3. COMPOSITION / INFORMATION ON INGREDIENTS

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). See Section 2.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>13463-67-7</td>
<td>50-100</td>
<td>*</td>
</tr>
<tr>
<td>1-methoxy-2-propanol</td>
<td>107-98-2</td>
<td>2.5-25</td>
<td>*</td>
</tr>
<tr>
<td>C.I. Basic red 1 (red only)</td>
<td>989-38-8</td>
<td>2.5-10</td>
<td>*</td>
</tr>
<tr>
<td>C.I. solvent orange (red only)</td>
<td>495-54-5</td>
<td>&lt;1</td>
<td>*</td>
</tr>
<tr>
<td>Phosphoric acid mono-bis-(2-ethylhexyl) ester (black and blue only)</td>
<td>12345-31-7</td>
<td>2.5-10</td>
<td>*</td>
</tr>
<tr>
<td>C.I. Solvent Violet 8 (black only)</td>
<td>84281-86-7</td>
<td>2.5-10</td>
<td>*</td>
</tr>
<tr>
<td>C.I. Solvent Orange 3 (black only)</td>
<td>495-54-5</td>
<td>2.5-10</td>
<td>*</td>
</tr>
<tr>
<td>C.I. Solvent Blue 4 &lt; 0.1% Michler’s Ketone (black and blue only)</td>
<td>112945-52-5</td>
<td>&lt; 2.5</td>
<td>*</td>
</tr>
<tr>
<td>C.I. Solvent Blue 51 (blue only)</td>
<td>68411-04-1</td>
<td>2.5-10</td>
<td>*</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Description of first-aid measures

Inhalation: Supply fresh air. Consult a POISON CENTER or doctor/physician in case of complaints.

Eye Contact: IF IN EYES: Rinse opened eye cautiously with running water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or Poison Control Center immediately.

Skin Contact: Generally the product does not irritate the skin. Wash skin with soap and water. Get medical attention if irritation develops and persists.

Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms/effects acute and delayed

Most Important Symptoms/Effects: No further relevant information available.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to Physician: No further relevant information available.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Agents: CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture: No further relevant information available.

Advice for firefighters

Protective equipment: No special measures required.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Remove all sources of ignition. Keep unprotected persons away. Wear protective clothing.

Environmental Precautions

Environmental Precautions: Avoid release to the environment. Dispose of contents/container to an approved waste disposal plant. See Section 12 for additional Ecological Information.

Methods and materials for containment and cleaning up

Methods for Containment: None required.

Methods for Cleaning Up: Pick up and transfer to properly labeled containers.
7. HANDLING AND STORAGE

Precautions for safe handling
Handling: Keep away from open flames, hot surfaces and sources of ignition.

Conditions for safe storage, including any incompatibilities
Storage: Store in a well-ventilated place. Keep cool.
Incompatible Products: None known based on information supplied.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters
Exposure Guidelines: This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls
Engineering Measures: None under normal use conditions.

Individual protection measures, such as personal protective equipment
Eye/Face Protection: No protective equipment is needed under normal use conditions.
Skin and Body Protection: No protective equipment is needed under normal use conditions.
Respiratory Protection: No protective equipment is needed under normal use conditions.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties (liquid ink only)

Physical State: Liquid
Appearance: Varies
Odor: Alcohol
Odor Threshold: No information available

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks / Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Boiling Point/Boiling</td>
<td>78 °C / 172 °F</td>
<td>(Liquid ink only)</td>
</tr>
<tr>
<td>Range Flash Point</td>
<td>13 °C / 55 °F</td>
<td>(Liquid ink only)</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>upper flammability limit</td>
<td>13.5%</td>
<td>None known</td>
</tr>
<tr>
<td>lower flammability limit</td>
<td>2.1%</td>
<td>None known</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No data available</td>
<td>None known</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No data available</td>
<td>None known</td>
</tr>
</tbody>
</table>

Other information
VOC Content (%): No data available
### 10. STABILITY AND REACTIVITY

**Reactivity:**

**Chemical stability**

Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.

**Possibility of hazardous reactions**

No dangerous reactions known.

**Conditions to avoid**

No further relevant information available.

**Incompatible materials**

No further relevant information available.

**Hazardous decomposition products:**

No dangerous decomposition products known

### 11. TOXICOLOGICAL INFORMATION

**Information on toxicological effects (liquid ink)**

**Acute toxicity**

**LD/LC50 values that are relevant for classification:**

- 989-38-8 C.I. Basic Red 1 (Red only)
- Oral LD50 250 mg/kg (rat)
- 84281-86-7 C.I. Solvent Violet 8 (black only)
- Oral LD50 700 mg/kg (rat)

**Primary irritant effect**

**On the skin:** Irritant to skin and mucous membranes.

**On the eye:** Strong irritant with the danger of severe eye injury.

**Sensitization:** No sensitizing effects known.

**Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

**Irritant**

**Carcinogenic categories**

IARC (International Agency for Research on Cancer)
None of the ingredients is listed.

NTP (National Toxicology Program)
None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

### 12. ECOLOGICAL INFORMATION

**Toxicity (refers to liquid ink)**

**Aquatic toxicity:**

- 989-38-8 C.I. Basic Red 1 (red only)
- EC50 / 48h 0.1-0.5 mg/l (Daphnia)
- LC50 / 96h 1-5 mg/l (Fish)

**Persistence and Degradability:** No further relevant information available.

**Bioaccumulation:** No further relevant information available.

**Mobility in Soil:** No further relevant information available.

**Eco toxic effects:**

**Remark:** Toxic for fish
13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Dispose of in accordance with all applicable local, state and federal regulations.

14. TRANSPORT INFORMATION

Not regulated

15. REGULATORY INFORMATION

Safety, Health and environmental regulation/legislation specific for the substance/mixture

Sara
- Section 355 (extremely hazardous substances): None of the ingredient is listed.
- Section 313 (Specific toxic chemical listings): None of the ingredients is listed.

TSCA (Toxic Substances Control Act):
All ingredients are listed.

Proposition 65
- Chemicals known to cause cancer: None of the ingredients is listed.
- Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.
- Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.
- Chemicals known to cause developmental toxicity: 64-17-5 ethanol

DSL/NDSL (Canada)
All ingredients are listed

Carcinogen Categories
- EPA (Environmental Protection Agency) None of the ingredients is listed.
- TLV (Threshold Limit Value established by ACGIH) 64-17-5 ethanol
- MAK (German Maximum Workplace Concentration) 64-17-5 ethanol
- NIOSH-Ca (National Institute for Occupational Safety) None of the ingredients is listed.
16. OTHER INFORMATION

Prepared By: compliance@umarkers.com
Issuing date: 08-Feb-2016
Revision date: 01-Mar-2020
Revision note: Product Names/Codes

General Disclaimer
The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet