Material Safety Data Sheet

Product Identification NISSEN METAL MARKER - RED

J.P. Nissen Co.
2544 Fairhill Avenue
P.O. Box 339
Glenside, PA 19038

Phone: 215-886-2025
Fax: 215-886-0707
Emergency: 215-836-2730

HMIS Ratings- Health 1 Flammability 2 Reactivity 1
NFPA Ratings- Health 1 Flammability 2 Reactivity 0

Hazardous ingredients – The information on this MSDS sheet refers to paint used in markers, however it applies to these paints in bulk. The paint is contained in a valve action reservoir and will not leak under normal conditions.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS#</th>
<th>%</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral spirits</td>
<td>64742-88-7</td>
<td>34-37</td>
<td>100ppm/8-hrs pel</td>
</tr>
<tr>
<td>Urethane resin</td>
<td>proprietary</td>
<td>32-34</td>
<td>See note</td>
</tr>
<tr>
<td>Pigment Red</td>
<td>002786-76-7</td>
<td>0-4</td>
<td>not established</td>
</tr>
<tr>
<td>Organoclay</td>
<td>68911-87-5</td>
<td>1-2</td>
<td>0.1 mg/cu.m*</td>
</tr>
</tbody>
</table>

Note: Urethane Resin manufactured by Reichold Chemicals
P.O. Box 13582 Research Triangle Park, NC 27709
EMERGENCIES: 800-424-9300

* Value applies to free dust, not as bound in a paint matrix.

Physical Data
- Boiling point: 318-385 F
- Vapor density: Heavier than air.
- Volatile %: 37% by volume
- Specific gravity: Less than 1.
- Evaporation rate: Slower than n-butyl acetate
- Appearance: Red viscous liquid with an aromatic odor.
- Volatile Organic Compound data not required because product only produced in quantities of less than 1 liter

Fire and Explosion Data
- Flammability Class: 2
- Flashpoint: 111 deg.F
- LEL: 1%
- UEL: 7%
- Extinguishing Media: Foam, Carbon dioxide, or any Class B extinguishing agent. Water may be unsuitable as an extinguishing medium, but helpful in keeping adjacent containers cool.

Health Hazard Data
- Listed as possible carcinogen: NTP – No IARC – OSHA – No
- Symptoms of over exposure: Headache, Dizziness, Nausea, Coughing, Eye, Throat and Skin Irritation.
- Effects of overexposure: Slight to severe irritation to eyes and mucous membranes. Dermatitis. Affects central nervous system.
- Emergency first aid: Inhalation; seek fresh air. Give artificial respiration if not breathing. Skin contact; Wash with soap and water. Ingestion; Call Physician.

Reactivity Data
- Stability: Stable
- Hazardous polymerization: Will not occur.
- Conditions to avoid: Heat, open flames and sparks.
- Incompatibility: Do not expose to strong oxidizers.
- Hazardous decomposition products: Carbon monoxide, carbon dioxide.

Environmental Protection Procedures
- Remove all sources of ignition, ventilate area, and use absorbent material to clean spills.
- Disposal method: Dispose of waste in accordance with all local, state and federal regulations.

Control Measures
- Respiratory protection: None required under normal use.
- Ventilation: Normal-working conditions.
- Protective Equipment: Safety glasses or goggles and gloves. No special clothing required under normal conditions of use.

Transportation
- Shipping Class ORM-D
- UN Number 1263
- Package Group III

Toxic Substances Control Act (TSCA) States:
- All components of this product are listed in the EPA’s Inventory of Chemical Substances as required under the Toxic Substances Control Act (TSCA).
- California Proposition 65 (Chemicals known to cause cancer)
Material Safety Data Sheet
Product Identification NISSEN METAL MARKER - WHITE

J.P. Nissen Co. Phone: 215-886-2025
2544 Fairhill Avenue Fax: 215-886-0707
P.O. Box 339 Emergency: 215-836-2730
Glenside, PA 19038

HMIS Ratings - Health 1 Flammability 2 Reactivity 1
NFPA Ratings - Health 1 Flammability 2 Reactivity 0

Hazardous ingredients – The information on this MSDS sheet refers to paint used in markers, however it applies to these paints in bulk. The paint is contained in a valve action reservoir and will not leak under normal conditions.

Ingredients CAS# % Exposure Limits
Mineral spirits 64742-88-7 34-37 100ppm/8-hrs pel
Urethane resin proprietary 32-34 See note
Titanium dioxide 13463-67-7 30-35 5 mg/cu.m*
Organoclay 68911-87-5 1-2 0.1 mg/cu.m*

Note: Urethane Resin manufactured by Reichold Chemicals
P.O. Box 13582 Research Triangle Park, NC 27709
EMERGENCIES: 800-424-9300
* Value applies to free dust, not as bound in a paint matrix.

Physical Data
Boiling point: 318-385 F Vapor density: Heavier than air.
Volatile %: 37% by volume Specific gravity: Less than 1.
Evaporation rate: Slower than n-butyl acetate
Appearance: White viscous liquid with an aromatic odor.

Volatile Organic Compound data not required because product only produced in quantities of less than 1 liter

Fire and Explosion Data
Flammability Class: 2 Flashpoint: 111 deg.F LEL:1% UEL: 7%
Extinguishing Media: Foam, Carbon dioxide, or any Class B extinguishing agent. Water may be unsuitable as an extinguishing medium, but helpful in keeping adjacent containers cool.

Health Hazard Data
Listed as possible carcinogen: NTP – No IARC – OSHA – No
Symptoms of over exposure: Headache, Dizziness, Nausea, Coughing, Eye, Throat and Skin Irritation.
Effects of overexposure: Slight to severe irritation to eyes and mucous membranes. Dermatitis. Affects central nervous system.
Emergency first aid: Inhalation; seek fresh air. Give artificial respiration if not breathing.
Skin contact; Wash with soap and water. Ingestion; Call Physician.

Reactivity Data
Stability: Stable Hazardous polymerization: Will not occur.
Conditions to avoid: Heat, open flames and sparks.
Incompatibility: Do not expose to strong oxidizers.

Hazardous decomposition products: Carbon monoxide, carbon dioxide.

Environmental Protection Procedures
Remove all sources of ignition, ventilate area, and use absorbent material to clean spills.
Disposal method: Dispose of waste in accordance with all local, state and federal regulations.

Control Measures
Respiratory protection: None required under normal use.
Ventilation: Normal-working conditions.

Protective Equipment: Safety glasses or goggles and gloves. No special clothing required under normal conditions of use.

Transportation
Shipping Class ORM-D
UN Number 1263
Package Group III

Toxic Substances Control Act (TSCA) States:
All components of this product are listed in the EPA’s Inventory of Chemical Substances as required under the Toxic Substances Control Act (TSCA)
California Proposition 65 (Chemicals known to cause cancer)
Material Safety Data Sheet

January 2005

Product Identification NISSEN METAL MARKER – YELLOW

J.P. Nissen Co.
2544 Fairhill Avenue
P.O. Box 339
Glenside, PA 19038

Phone: 215-886-2025
Fax: 215-886-0707
Emergency: 215-836-2730

HMIS Ratings- Health 1 Flammability 2 Reactivity 1
NFPA Ratings- Health 1 Flammability 2 Reactivity 0

Hazardous ingredients – The information on this MSDS sheet refers to paint used in markers, however it applies to these paints in bulk. The paint is contained in a valve action reservoir and will not leak under normal conditions.

Ingredients

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<td>100ppm/8-hrs pel</td>
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<tr>
<td>Urethane resin</td>
<td>proprietary</td>
<td>32-34</td>
<td>See note</td>
</tr>
<tr>
<td>Organoclay</td>
<td>68911-87-5</td>
<td>1-3</td>
<td>0.1 mg/cu.m*</td>
</tr>
<tr>
<td>Pigment Yellow 74</td>
<td>#6358-31-2</td>
<td>0-4</td>
<td>not established</td>
</tr>
<tr>
<td>Pigment Yellow 83</td>
<td>#5567-15-7</td>
<td>0-3</td>
<td>not established</td>
</tr>
</tbody>
</table>

Note: Urethane Resin manufactured by Reichold Chemicals
P.O. Box 13582 Research Triangle Park, NC 27709
EMERGENCIES: 800-424-9300

* Value applies to free dust, not as bound in a paint matrix.

Physical Data

Boiling point: 318-385 F
Vapor density: Heavier than air.
Volatile %: 37% by volume
Specific gravity: Less than 1.
Evaporation rate: Slower than n-butyl acetate
Appearance: Yellow viscous liquid with an aromatic odor.

Volatile Organic Compound data not required because product only produced in quantities of less than 1 liter

Fire and Explosion Data

Flammability Class: 2
Flashpoint: 111 deg.F LEL: 1% UEL: 7%
Extinguishing Media: Foam, Carbon dioxide, or any Class B extinguishing agent. Water may be unsuitable as an extinguishing medium, but helpful in keeping adjacent containers cool.

Health Hazard Data

Listed as possible carcinogen; NTP – No IARC – OSHA – No
Symptoms of over exposure: Headache, Dizziness, Nausea, Coughing, Eye, Throat and Skin Irritation.
Effects of overexposure: Slight to severe irritation to eyes and mucous membranes. Dermatitis. Affects central nervous system.

Emergency first aid: Inhalation; seek fresh air. Give artificial respiration if not breathing. Skin contact; Wash with soap and water. Ingestion; Call Physician.

Reactivity Data

Stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Heat, open flames and sparks.
Incompatibility: Do not expose to strong oxidizers.
Hazardous decomposition products: Carbon monoxide, carbon dioxide.

Environmental Protection Procedures

Remove all sources of ignition, ventilate area, and use absorbent material to clean spills. Disposal method: Dispose of waste in accordance with all local, state and federal regulations.

Control Measures

Respiratory protection: None required under normal use.
Ventilation: Normal-working conditions.
Protective Equipment: Safety glasses or goggles and gloves. No special clothing required under normal conditions of use.

Transportation

Shipping Class ORM-D
UN Number: 1263
Package Group III

Toxic Substances Control Act (TSCA) States:

All components of this product are listed in the EPA’s Inventory of Chemical Substances as required under the Toxic Substances Control Act (TSCA)
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