1. Product and Company Identification

Material name: Castin Craft Mold Builder
Revision date: 07-22-2014
Version #: 01
CAS #: Mixture
Product code: 00779, 00787, 00795, 01690, 01700 Michaels SKU: 558726
MSDS Number: 7211760
Product use: Latex solution for brush-on rubber mold making
Manufacturer/Supplier: Environmental Technology, Inc.
300 S. Bay Depot Road
Fields Landing
CA 95537
eti@eti-usa.com
Contact Person: Technical Director
Telephone number: 707-443-9323
Emergency: CHEMTREC 800-424-9300

2. Hazards Identification

Physical state: Liquid.
Appearance: Creamy liquid.
Emergency overview: CAUTION
OSHA regulatory status: This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects:
- Routes of exposure: Inhalation. Eye contact. Skin contact.
- Eyes: Exposed individuals may experience eye tearing, redness, and discomfort.
- Skin: Contact may cause irritation and redness.
- Inhalation: Vapors may irritate throat and respiratory system and cause coughing.
- Ingestion: May cause discomfort if swallowed.
Target organs: Eyes. Skin. Respiratory system.
Chronic effects: No other specific acute or chronic health impact noted.
Signs and symptoms: Irritation of eyes and mucous membranes. Skin irritation. Symptoms may include coughing, difficulty breathing and shortness of breath.
Potential environmental effects: This material is not expected to be harmful to aquatic life.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia</td>
<td>7664-41-7</td>
<td>&lt;1</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

First aid procedures:
- Eye contact: Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if irritation persists after washing.
- Skin contact: Wash contact areas with soap and water. Get medical attention if irritation develops or persists.
- Inhalation: Move to fresh air. Get medical attention if any discomfort occurs. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure.
Ingestion
Rinse mouth thoroughly with water and give large amounts of milk or water, if person is conscious. Never give anything by mouth to an unconscious person. Get medical attention if any discomfort continues.

Notes to physician
Treat symptomatically.

General advice
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures
Flammable properties
The product is not flammable. Will burn if involved in a fire.

Extinguishing media
Suitable extinguishing media
Water spray, dry powder or carbon dioxide.

Unsuitable extinguishing media
No restrictions known.

Protection of firefighters
Specific hazards arising from the chemical
No unusual fire or explosion hazards noted.

Fire fighting equipment/instructions
Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

Hazardous combustion products
Combustion and decomposition products may be toxic. CO, CO2, hydrocarbons, and dense black smoke.

6. Accidental Release Measures
Personal precautions
Avoid inhalation and contact with skin and eyes. Wear appropriate personal protective equipment (See Section 8).

Environmental precautions
Avoid discharge into drains, water courses or onto the ground.

Methods for containment
None necessary.

Methods for cleaning up
Absorb spillage with suitable absorbent material. For waste disposal, see Section 13 of the MSDS. Never return spills to original containers for re-use.

Other information
Clean up in accordance with all applicable regulations.

7. Handling and Storage
Handling
Handle and open container with care. Avoid inhalation of vapors and contact with skin and eyes. Use appropriate Personal Protective Equipment. Observe good industrial hygiene practices.

Storage
Store in original container. Protect from freezing. Avoid extreme of temperatures.

8. Exposure Controls / Personal Protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia (7664-41-7)</td>
<td>STEL</td>
<td>35 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>25 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia (7664-41-7)</td>
<td>PEL</td>
<td>35 mg/m3</td>
</tr>
<tr>
<td></td>
<td>50 ppm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Canada. Alberta OELs (Occupational Health &amp; Safety Code, Schedule 1, Table 2)</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia (7664-41-7)</td>
<td>STEL</td>
<td>24 mg/m3</td>
</tr>
<tr>
<td></td>
<td>35 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>17 mg/m3</td>
</tr>
<tr>
<td></td>
<td>25 ppm</td>
<td></td>
</tr>
</tbody>
</table>
Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

<table>
<thead>
<tr>
<th>Components</th>
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</table>

Canada. Ontario OELs. (Ministry of Labor - Control of Exposure to Biological or Chemical Agents)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
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<tr>
<td>Ammonia (7664-41-7)</td>
<td>STEL</td>
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</tr>
<tr>
<td></td>
<td>TWA</td>
<td>17 mg/m3</td>
</tr>
</tbody>
</table>

Canada. Quebec OELS. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

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<thead>
<tr>
<th>Components</th>
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<tbody>
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<td>Ammonia (7664-41-7)</td>
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<td>24 mg/m3</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>17 mg/m3</td>
</tr>
</tbody>
</table>

Mexico. Occupational Exposure Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonia (7664-41-7)</td>
<td>STEL</td>
<td>27 mg/m3</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>18 mg/m3</td>
</tr>
</tbody>
</table>

**Engineering controls**

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Provide easy access to water supply and eye wash facilities.

**Personal protective equipment**

- **Eye / face protection**: Wear approved safety goggles.
- **Skin protection**: Wear protective gloves. Wear appropriate clothing to prevent repeated or prolonged skin contact.
- **Respiratory protection**: Wear appropriate NIOSH respirator when ventilation is inadequate and occupational exposure limits are exceeded.
- **General hygiene considerations**: Wash hands after handling.

**9. Physical & Chemical Properties**

- **Appearance**: Creamy liquid.
- **Color**: Cream
- **Odor**: Slight ammonia.
- **Odor threshold**: Not available.
- **Physical state**: Liquid.
- **Form**: Liquid.
- **pH**: Not available.
- **Melting point**: 32 °F (0 °C)
- **Freezing point**: Not available.
- **Boiling point**: 212 °F (100 °C)
- **Flash point**: Not available.
- **Evaporation rate**: Not available.
- **Flammability limits in air, upper, % by volume**: Not available.
- **Flammability limits in air, lower, % by volume**: Not available.
- **Vapor pressure**: Not available.
- **Vapor density**: Not available.
- **Specific gravity**: 0.94 (Water = 1)
- **Solubility (water)**: Miscible.
10. Chemical Stability & Reactivity Information

Chemical stability
This product is stable under expected conditions of use.

Conditions to avoid
Freezing. Excessive heat.

Incompatible materials

Hazardous decomposition products
Thermal decomposition or combustion may liberate toxic gases or fumes.

Possibility of hazardous reactions
Hazardous polymerization does not occur.

11. Toxicological Information

Acute effects
May cause discomfort if swallowed.

Local effects
May cause eye, skin and respiratory tract irritation.

Sensitization
Not a skin sensitizer.

Chronic effects
No other specific acute or chronic health impact noted.

Carcinogenicity
Not classified.

Epidemiology
Not available.

Mutagenicity
Not classified.

Neurological effects
Not available.

Reproductive effects
Not classified.

Teratogenicity
Not available.

Symptoms and target organs
Irritation of eyes and mucous membranes. Skin irritation. Symptoms may include coughing, difficulty breathing and shortness of breath.

Further information
Not available.

12. Ecological Information

Ecotoxicological data

<table>
<thead>
<tr>
<th>Product</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Castin Craft Mold Builder (Mixture)</td>
<td>LC50 Fish: 1992.3333 mg/l 96 hours estimated</td>
</tr>
<tr>
<td>Ammonia (7664-41-7)</td>
<td>LC50 Carp (Hypophthalmichthys nobilis): 0.3 mg/l 96 hours</td>
</tr>
</tbody>
</table>

Ecotoxicity
Not expected to be harmful to aquatic organisms.

Environmental effects
The product is 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.

Bioaccumulation / Accumulation
No data available.

Partition coefficient
Not available.

Mobility in environmental media
The product is soluble in water.

13. Disposal Considerations

Waste codes
Not regulated.

Disposal instructions
Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

Waste from residues / unused products
Dispose in accordance with local regulations.

Contaminated packaging
No special precautions.
14. Transport Information

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

TDG
Not regulated as dangerous goods.

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.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

US EPCRA (SARA Title III) Section 302 - Extremely Hazardous Spill: Reportable quantity
Ammonia (CAS 7664-41-7) 100 LBS

US EPCRA (SARA Title III) Section 302 - Extremely Hazardous Substance: Threshold Planning Quantity
Ammonia (CAS 7664-41-7) 500 LBS

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration
Ammonia (CAS 7664-41-7) 1.0 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance
Ammonia (CAS 7664-41-7) Listed.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)
Ammonia: 100

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

Section 302 extremely hazardous substance (40 CRF 355, Appendix A)
No

Section 311/312 (40 CRF 370)
No

Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)
Not controlled

Canadian regulations
This product is not classified according to WHMIS classification criteria.

WHMIS status
Controlled

Inventory status

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<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>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Country(s) or region | Inventory name | On inventory (yes/no)*
--- | --- | ---
Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes
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)

State regulations
This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - California Hazardous Substances (Director's): Listed substance
Ammonia (CAS 7664-41-7) Listed.

US - Massachusetts RTK - Substance: Listed substance
Ammonia (CAS 7664-41-7) Listed.

US - New Jersey Community RTK (EHS Survey): Reportable threshold
Ammonia (CAS 7664-41-7) 500 LBS

US - New Jersey RTK - Substances: Listed substance
Ammonia (CAS 7664-41-7) Listed.

US - Pennsylvania RTK - Hazardous Substances: Listed substance
Ammonia (CAS 7664-41-7) Listed.

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

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

NFPA ratings
Health: 1
Flammability: 0
Instability: 0

Disclaimer
The information in the sheet was written based on the best knowledge and experience currently available.

Issue date
07-22-2014