SAFETY DATA SHEET

1. Identification

Product identifier EasyCast Hardener

Other means of identification

<table>
<thead>
<tr>
<th>SDS number</th>
<th>7511850</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product code</td>
<td>33008, 33008 MICHAELS, 33008C MICHAELS, 33010M, 33016, 33032, 33100, 33128, 33640, 33640R, 33201, 33202, 33203, 33204, 33205, MICHAELS SKUs: 408248, 408249, 408250, 408251, 408252, 408253, 408254, 408255.</td>
</tr>
</tbody>
</table>

Recommended use Casting Epoxy.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

<table>
<thead>
<tr>
<th>Company name</th>
<th>Environmental Technology, Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>300 S. Bay Depot Road Fields Landing CA 95537, USA.</td>
</tr>
<tr>
<td>Telephone number</td>
<td>001 707-443-9323</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:mail@eti-usa.com">mail@eti-usa.com</a></td>
</tr>
<tr>
<td>Contact person</td>
<td>Technical Director</td>
</tr>
<tr>
<td>Emergency phone number</td>
<td>800-424-9300 (CHEMTREC)</td>
</tr>
</tbody>
</table>

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards

| Acute toxicity, oral                  | Category 4 |
| Skin corrosion/irritation             | Category 1 |
| Serious eye damage/eye irritation     | Category 1 |
| Sensitization, skin                  | Category 1 |
| Reproductive toxicity (fertility, the unborn child) | Category 2 |

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of damaging fertility. Suspected of damaging the unborn child.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace.

Response

If swallowed: Rinse mouth. Do not induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Wash contaminated clothing before reuse.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)
None known.

Supplemental information
None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonyl phenol</td>
<td>Proprietary</td>
<td>30-70</td>
</tr>
<tr>
<td>Polyoxypropylenediamine</td>
<td>Proprietary</td>
<td>&lt;40</td>
</tr>
<tr>
<td>3-Aminomethyl-3,5,5-trimethyl-cyclohexylamine</td>
<td>Proprietary</td>
<td>&lt;25</td>
</tr>
<tr>
<td>Trimethylolpropane poly(oxypropylene)triamine</td>
<td>Proprietary</td>
<td>&lt;25</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.

The manufacturer has claimed the exact percentage as trade secret under the OSHA Hazard Communication Standard.

4. First-aid measures

Inhalation
If inhaled, remove to fresh air. For breathing difficulties, oxygen may be necessary. Get medical attention immediately.

Skin contact
Remove contaminated clothing. Rinse skin thoroughly with lukewarm water for at least 15 minutes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Ingestion
Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Call a physician or Poison Control Center immediately. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Most important symptoms/effects, acute and delayed
Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract. May cause an allergic skin reaction. Dermatitis. Rash. Contact can cause corrosive burns, corneal damage, and blindness. Itching, redness, swelling, burning or blistering of skin.

Indication of immediate medical attention and special treatment needed
Exposure may aggravate pre-existing skin disorders. Treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information
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. The toxicological properties of this material have not been fully investigated.

5. Fire-fighting measures

Suitable extinguishing media
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media
Water. 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 such as: Carbon oxides. Nitrogen Oxides (NOx).

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
In case of fire do not breath fumes. Move container from fire area if it can be done 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.
6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not get in eyes, on skin or on clothing. 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.

**Methods and materials for containment and cleaning up**

Keep unnecessary personnel away. This product is miscible in water. 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. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

**Environmental precautions**

Avoid discharge into drains, water courses or onto the ground. Contact local authorities in case of spillage to drain/aquatic environment.

7. Handling and storage

**Precautions for safe handling**

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Do not get this material in your eyes, on your skin, or on your clothing. Do not taste or swallow. Avoid contact during pregnancy/while nursing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Use personal protective equipment as required. Wash hands thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities**

Keep out of the reach of children. Store locked up. Store in tightly closed original container in a dry, cool and well-ventilated place. Store away from incompatible materials, see Section 10 of the SDS.

8. Exposure controls/personal protection

**Occupational exposure limits**

No exposure limits noted for ingredient(s).

**Biological limit values**

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

**Exposure guidelines**

No exposure standards allocated. Use personal protective equipment as required. Keep working clothes separately.

**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. Eye wash facilities and emergency shower must be available when handling this product.

**Individual protection measures, such as personal protective equipment**

- **Eye/face protection**
  Wear safety glasses with side shields (or goggles) and a face shield.

- **Skin protection**
  Chemical resistant gloves. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

- **Hand protection**
  Wear appropriate chemical resistant clothing to prevent any possibility of skin contact.

- **Other**
  If ventilation is insufficient, suitable respiratory protection must be provided.

- **Respiratory protection**
  Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using, do not eat, drink or smoke. 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. Contaminated work clothing should not be allowed out of the workplace. Wash at the end of each work shift and before eating, smoking and using the toilet.

9. Physical and chemical properties

**Appearance**

Viscous liquid.

**Physical state**

Liquid.

**Form**

Liquid.

**Color**

Slightly yellow.

**Odor**

Ammonia-like.
Odor threshold
Not available.
pH
Not available.
Melting point/freezing point
Not available.
Initial boiling point and boiling range
431.6 °F (222 °C)
Flash point
212.0 °F (100.0 °C) Setaflash
Evaporation rate
Not available.
Flammability (solid, gas)
Not available.
Upper/lower flammability or explosive limits
Flammability limit - lower (%)
Not available.
Flammability limit - upper (%)
Not available.
Explosive limit - lower (%)
Not available.
Explosive limit - upper (%)
Not available.
Vapor pressure
< 1 mm Hg @ 68 F
Vapor density
Not available.
Relative density
0.97 (69.8 °F (21 °C))
Solubility(ies)
Solubility (water) Slightly soluble
Partition coefficient (n-octanol/water) Not available.
Auto-ignition temperature
Not available.
Decomposition temperature
Not available.
Viscosity
Not available.
Other information
Density 8.00 lb/gal
Percent volatile 0 %
VOC 0
10. Stability and reactivity
Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport. Read and follow manufacturer's recommendations.
Chemical stability
Stable under normal temperature conditions and recommended use.
Possibility of hazardous reactions
Hazardous polymerization does not occur.
Conditions to avoid
Avoid temperatures exceeding the flash point. Reacts violently with strong acids. This product may react with oxidizing agents. Do not mix with other chemicals. Avoid incompatible materials and intense heat.
Incompatible materials
Hazardous decomposition products
None expected under normal conditions of use.
11. Toxicological information
Information on likely routes of exposure
Inhalation Prolonged inhalation may be harmful. May cause irritation to the respiratory system.
Skin contact Causes severe skin burns. May be harmful in contact with skin. May cause an allergic skin reaction.
Eye contact Causes serious eye damage.
Ingestion Causes digestive tract burns. Harmful if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics
Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause an allergic skin reaction. Dermatitis. Rash.
Information on toxicological effects
Acute toxicity

Harmful if swallowed. May cause an allergic skin reaction. May cause irritation to the respiratory system.

Components | Species | Test Results
--- | --- | ---
3-Aminomethyl-3,5,5-trimethyl-cyclohexylamine (CAS Proprietary) |  | 
**Acute**
Oral LD50 Rat | 1030 mg/kg
Nonyl phenol (CAS Proprietary) |  | 
**Acute**
Dermal LD50 Rabbit | 2031 mg/kg
Oral LD50 Rat | 1200 mg/kg
Trimethylolpropane poly(oxypropylene)triamine (CAS Proprietary) |  | 
**Acute**
Dermal LD50 Rabbit | 610 mg/kg
Oral LD50 Rat | 220 mg/kg

Skin corrosion/irritation
Causes severe skin burns.

Serious eye damage/eye irritation
Causes serious eye damage.

Respiratory or skin sensitization
Due to partial or complete lack of data the classification is not possible.

Skin sensitization
May cause an allergic skin reaction.

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.

IARC Monographs. Overall Evaluation of Carcinogenicity
Not listed.

NTP Report on Carcinogens
Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)
Not listed.

Reproductive toxicity
Suspected of damaging the unborn child. Suspected of damaging fertility.

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
Due to the high viscosity the product is not an aspiration hazard.

Chronic effects
The toxicological properties of this material have not been investigated.

12. Ecological information

Ecotoxicity
Expected to be very toxic to aquatic organisms. May cause long-term adverse effects in the environment.

Components | Species | Test Results
--- | --- | ---
3-Aminomethyl-3,5,5-trimethyl-cyclohexylamine (CAS Proprietary) |  | 
**Aquatic**
Acute
Algae EC50 Scenedesmus subspicatus > 50 mg/l, 72 hours
Crustacea EC50 Daphnia magna 23 mg/l, 48 hours
Fish LC50 Leuciscus idus 110 mg/l, 96 hours
Components Test Results

Species

<table>
<thead>
<tr>
<th>Chronic</th>
<th>Algae</th>
<th>EC50</th>
<th>Scenedesmus subspicatus</th>
<th>11 mg/l, 72 hours</th>
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<tbody>
<tr>
<td>Crustacea</td>
<td>NOEC</td>
<td>Daphnia magna</td>
<td>3 mg/l, 21 days</td>
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</tbody>
</table>

Nonyl phenol (CAS Proprietary)

<table>
<thead>
<tr>
<th>Aquatic</th>
<th>Algae</th>
<th>EC50</th>
<th>Scenedesmus subspicatus</th>
<th>1.3 mg/l, 72 Hours</th>
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</thead>
<tbody>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia magna</td>
<td>0.085 mg/l, 48 Hours</td>
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</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Pimephales promelas</td>
<td>0.128 mg/l, 96 Hours</td>
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</table>

Chronic

<table>
<thead>
<tr>
<th>Crustacea</th>
<th>NOEC</th>
<th>Daphnia magna</th>
<th>24 µg/l, 21 days</th>
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<tbody>
<tr>
<td>Fish</td>
<td>NOEC</td>
<td>Pimephales promelas</td>
<td>0.0074 mg/l, 33 days</td>
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Polyoxypropylenediamine (CAS Proprietary)

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<th>Algae</th>
<th>NOEC</th>
<th>Algae</th>
<th>0.32 mg/l, 72 hours</th>
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</table>

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Nonyl phenol 5.71

Mobility in soil

No data available.

Other adverse effects

None known.

13. Disposal considerations

Disposal instructions

Dispose in accordance with applicable federal, state, and local regulations. Do not allow this material to drain into sewers/water supplies.

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

Dispose in accordance with applicable federal, state, and local regulations.

14. Transport information

DOT

UN number UN1760
UN proper shipping name Corrosive liquids, n.o.s. (Nonyl Phenol Mixture)
Transport hazard class(es)

Class 8
Subsidiary risk -
Label(s) 8
Packing group III
Environmental hazards

Marine pollutant Yes
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Special provisions IB3, T7, TP1, TP28
Packaging exceptions 154
Packaging non bulk 203
Packaging bulk 241

IATA

UN number UN1760
UN proper shipping name Corrosive liquids, n.o.s. (Nonyl Phenol Mixture)
Transport hazard class(es)

Class 8
Subsidiary risk -
Label(s) 8
Packing group III
Environmental hazards Yes
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG
UN number UN1760
UN proper shipping name Corrosive liquids, n.o.s. (Nonyl Phenol Mixture)
Transport hazard class(es)
  Class 8
  Subsidiary risk -
  Label(s) 8
Packing group III
Environmental hazards
  Marine pollutant Yes
EmS Not available.
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
  Nonyl phenol (CAS Proprietary) 1.0 % One-Time Export Notification only.
TSCA Chemical Action Plans, Chemicals of Concern
  Nonyl phenol (CAS Proprietary) Nonylphenol (NP) and Nonylphenol Ethoxylates (NPEs) Action Plan
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 listed.
Toxic Substances Control Act (TSCA)
Superfund Amendments and Reauthorization Act of 1986 (SARA)
  SARA 302 Extremely hazardous substance
    Not listed.
  SARA 311/312 Hazardous chemical
    Yes
    Classified hazard categories
      Acute toxicity (any route of exposure)
      Skin corrosion or irritation
      Serious eye damage or eye irritation
      Respiratory or skin sensitization
      Reproductive toxicity
SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonyl phenol</td>
<td>Proprietary</td>
<td>30-70</td>
</tr>
</tbody>
</table>

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**
3-Aminomethyl-3,5,5-trimethyl-cyclohexylamine (CAS Proprietary)
Nonyl phenol (CAS Proprietary)

**US. Pennsylvania Worker and Community Right-to-Know Law**
Not listed.

**US. Rhode Island RTK**
Not regulated.

**California Proposition 65**
California Safe Drinking Water and Toxic Enforcement Act of 2016 (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**

<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>No</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>No</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>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>(PICCS)</td>
<td></td>
</tr>
<tr>
<td>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</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**: 21-July-2014
- **Revision date**: 22-July-2019
- **Version #**: 02

**HMIS® ratings**
- Health: 3*
- Flammability: 0
- Physical hazard: 0

**List of abbreviations**
- LD50: Lethal Dose 50%.
- LC50: Lethal Concentration 50%.
- EC50: Effective Concentration, 50%.
- NOAEC: No Observed Adverse Effect Concentration.
- PEL: Permissible Exposure Limit.
- STEL: Short-term Exposure Limit.
- TWA: Time Weighted Average Value.

**References**
- ACGIH
- EPA: AQUIRE database
- NLM: Hazardous Substances Data Base
- US. IARC Monographs on Occupational Exposures to Chemical Agents
- HSDB® - Hazardous Substances Data Bank
- IARC Monographs. Overall Evaluation of Carcinogenicity
- National Toxicology Program (NTP) Report on Carcinogens
- ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
Disclaimer

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