

SAFETY DATA SHEET

1. Identification

Product identifier	EasyCast Hardener
Other means of identification	
SDS number	7511850
Product code	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.
Recommended use	Casting Epoxy.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	
Company name	Environmental Technology, Inc.
Address	300 S. Bay Depot Road Fields Landing CA 95537, USA.
Telephone number	001 707-443-9323
E-mail	mail@eti-usa.com
Contact person	Technical Director
Emergency phone number	800-424-9300 (CHEMTREC)

2. Hazard 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

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 vapour. 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 should 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. 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 CENTRE/doctor. Wash contaminated clothing before reuse.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
3-Aminomethyl-3,5,5-trimethyl-cyclohexylamine		2855-13-2	10-30 % wt/wt
Nonyl phenol		84852-15-3	30-60 % wt/wt
Polyoxypropylenediamine		9046-10-0	15-40 % wt/wt
Trimethylolpropane poly(oxypropylene)triamine		39423-51-3	10-30 % wt/wt

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. The exact concentrations of the above listed chemicals are being withheld as a trade secret.

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 centre 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 centre 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 Centre 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 (CO ₂).
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 (NO _x).
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 vapour. 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.
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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	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. 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 vapour. 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.
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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.
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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	
Hand 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.
Other	Wear appropriate chemical resistant clothing to prevent any possibility of skin contact.
Respiratory protection	If ventilation is insufficient, suitable respiratory protection must be provided.
Thermal hazards	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 or using the toilet.

9. Physical and chemical properties

Appearance	Viscous liquid.
Physical state	Liquid.
Form	Liquid.
Colour	Slightly yellow.
Odour	Ammonia-like.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	222 °C (431.6 °F)
Flash point	100.0 °C (212.0 °F) Setaf flash
Evaporation rate	Not available.

Flammability (solid, gas)	Not applicable.
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.
Vapour pressure	< 1 mm Hg @ 20 °C
Vapour density	Not available.
Relative density	0.97 (21 °C (69.8 °F))
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
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
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 polymerisation 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	Acids. Strong oxidising agents. Oxidizing agents. Alkali metals. Peroxides. Phenols.
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 2855-13-2)		
Acute		
Oral		
LD50	Rat	1030 mg/kg
Nonyl phenol (CAS 84852-15-3)		
Acute		
Dermal		
LD50	Rabbit	2031 mg/kg
Oral		
LD50	Rat	1200 mg/kg
Trimethylolpropane poly(oxypropylene)triamine (CAS 39423-51-3)		
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 sensitisation		
Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.	
Skin sensitisation	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.	
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 2855-13-2)		
Aquatic		
<i>Acute</i>		
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
<i>Chronic</i>		
Algae	EC50	Scenedesmus subspicatus 11 mg/l, 72 hours
Crustacea	NOEC	Daphnia magna 3 mg/l, 21 days
Nonyl phenol (CAS 84852-15-3)		
Aquatic		
<i>Acute</i>		
Algae	EC50	Scenedesmus subspicatus 1.3 mg/l, 72 Hours
Crustacea	EC50	Daphnia magna 0.085 mg/l, 48 Hours

Components		Species	Test Results
Fish	LC50	Pimephales promelas	0.128 mg/l, 96 Hours
<i>Chronic</i>			
Crustacea	NOEC	Daphnia magna	24 µg/l, 21 days
Fish	NOEC	Pimephales promelas	0.0074 mg/l, 33 days
Polyoxypropylenediamine (CAS 9046-10-0)			
Aquatic			
<i>Chronic</i>			
Algae	NOEC	Algae	0.32 mg/l, 72 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Nonyl phenol (CAS 84852-15-3) 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

TDG

UN number UN1760

UN proper shipping name Corrosive liquids, n.o.s. (Nonyl Phenol Mixture)

Transport hazard class(es)

Class 8

Subsidiary risk -

Packing group III

Environmental hazards Yes

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

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 Not established.

General information IMDG Regulated Marine Pollutant.

15. Regulatory information

Canadian regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto Protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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

Issue date 13-July-2017

Revision date 22-July-2019

Version No. 02

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

Environmental Technology, 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.