Material Safety Data Sheet

EpoxAcast® 690 Clear

MSDS No. 36

Date Of Preparation: April 7, 2011

Revision: 0000

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: EpoxAcast ® 690 Clear Part A
Other Designations: Formulated Epoxy
General Use: Casting Resin
Manufacturer: Smooth-On Inc., 2000 St. John St., Easton PA 18042
Phone (610) 252-5800, FAX (610) 252-6200
Emergency Contact: Chem-Tel
Domestic 800-255-3924
International 813-248-0585

Section 2- Hazards Identification

Not hazardous according to United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS) and Council directive 1999/45/EC and its subsequent amendments.

HMIS	
H	1
F	1
R	0

Section 3 - Composition / Information on Ingredients

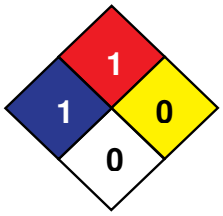
No hazardous ingredients

Section 4 - First Aid Measures

Inhalation: Remove to fresh air: if breathing is labored seek medical attention.
Eye Contact: Flush with water for 15 minutes: seek medical attention
Skin Contact: Remove with soap and water: if redness or rash develops seek medical attention: Launder contaminated clothing before reuse.
Ingestion: seek medical attention
After first aid, get appropriate in-plant, paramedic, or community medical support.

Section 5 - Fire-Fighting Measures

NFPA



Flash Point: >485 °F (252 °C)
Flash Point Method: PMCC
Flammability Classification: Non-Flammable
Extinguishing Media: Foam, Dry Chemical, and Carbon Dioxide
Unusual Fire or Explosion Hazards: None
Hazardous Combustion Products: Oxides of Nitrogen and Carbon, Acids and Aldehydes when burned.
Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.
Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full-face piece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill /Leak Procedures

Containment: Dike and contain for later disposal. Do not release into sewers or waterways.
Cleanup: Scrape up excess.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Avoid prolonged or repeated skin contact. Use good general housekeeping procedures.
Storage Requirements: Store in Closed containers. Use only with adequate ventilation.

Section 8 - Exposure Controls / Personal Protection

Respiratory Protection: Follow OSHA respirator regulations 29 CFR 1910.134 and European Standards EN 141, 143 and 371; wear an MSHA/NIOSH or European Standards EN 141, 143 and 371 approved respirators. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations 29 CFR 1910.133 and European Standard EN166. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance and Odor: Water-White to Yellow; Faint Epoxy Odor
Vapor Pressure: None (Polymeric Resin)
Vapor Density (Air=1): None (Polymeric Resin)
Specific Gravity (H_2O=1, at 4 °C): 1.14

Water Solubility: negligible
Boiling Point: None (Polymeric Resin)
Freezing/Melting Point: None (Polymeric Resin)
Evaporation Rate: None (Polymeric Resin)
Viscosity: 10 poise

Section 10 - Stability and Reactivity

Stability: This product is stable at room temperature in closed containers under normal storage and handling conditions.
Polymerization: Hazardous polymerization cannot occur.
Chemical Incompatibilities: Strong oxidizing agents, strong Lewis or mineral acids.
Conditions to Avoid: Mixing with Amines under uncontrolled conditions.
Hazardous Decomposition Products: Thermal oxidative decomposition of Epoxy Resin EEW-190 can produce: Oxides of Nitrogen and Carbon, Acids and Aldehydes when burned.

Section 11- Toxicological Information

Eye Effects: Irritation
Skin Effects: Irritation

Carcinogenicity: None
Mutagenicity: None Determined
Teratogenicity: None Determined

Section 12 - Ecological Information

None Determined

Section 13 - Disposal Considerations

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and local regulations.

Section 14 - Transport Information

DOT	IATA	IMDG
Not Regulated	**Not Regulated**	**Not Regulated**

Section 15 - Regulatory Information

EPA Regulations: This material in not considered a hazardous material.

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33): None

RCRA Hazardous Waste Classification (40 CFR 261): Not classified

CERCLA Hazardous Substance (40 CFR 302.4) unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec. 112

CERCLA Reportable Quantity (RQ), None

SARA 311/312 Codes: None

SARA Toxic Chemical (40 CFR 372.65): None

SARA EHS (**Extremely Hazardous Substance) (40 CFR 355):** Not listed,

TSCA Inventory Status (40CFR710): All components of this formula are on the TSCA inventory

California Proposition 65: This product does not intentionally contain any chemicals which have been identified by the state of California to cause cancer, birth defects or other reproductive harm.

16 - Other Information

Disclaimer: The information contained in this MSDS is considered accurate as of the version date. However, no warranty is expressed or implied regarding the accuracy of the data. Since the use of this product is not within the control of Smooth-On Inc., it is the user's obligation to determine the suitability of the product for its intended application and assumes all risk and liability for its safe use.

This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA)Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS), and European Union Directive 1907/2006/EEC (REACH). Hazard symbols and risk phrases are based on maximum listed concentration of each hazardous ingredient. Unlisted ingredients are not "hazardous" per the OSHA Hazard Communication Standard (29 CFR 1910.1200), the Canadian Workplace Hazardous Materials Information System (WHMIS) or the European Union (EU/EEC) directive 1907/2006/EEC and are considered trade secrets under US Federal Law (29CFR and 40CFR), Canadian Law (Health Canada Legislation), and European Union Directives

Material Safety Data Sheet

EpoxAcast® 690 Clear

MSDS No. 36

Date Of Preparation: April 7, 2011

Revision: 0000

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: EpoxAcast ® 690 Clear Part B
Other Designations: Curing Agent, Epoxy
General Use: Casting Resin
Manufacturer: Smooth-On Inc., 2000 St. John St., Easton PA 18042
Phone (610) 252-5800, FAX (610) 252-6200
Emergency Contact: Chem-Tel
Domestic 800-255-3924
International 813-248-0585

Section 2- Hazards Identification

Hazard Designation:

Europe

C: Corrosive

Canada

HMIS	
H	3
F	1
R	0

Risk Phrases pertaining to particular dangers
R21: Harmful to skin
R22: Harmful if swallowed
R34: Causes burns.
R36: Irritating to eyes.
R37: Irritating to respiratory system.
R38: Irritating to skin

Classified according to Articles 6 & of Directive 1999/45/EC

Section 3 - Hazards Identification

Component	ACGIH TWA	Exposure Limits OSHA PEL	Hazard Designation	Weight Percent (%)
Polyoxypropylene diamine CAS Number: 9046-10-0 EINECS: Polymer Exempt	None Established	None Established	C	**60-100**

Section 4 - First Aid Measures

Inhalation: Remove too fresh air; if breathing is labored seek medical attention.
Eye Contact: Flush with water for 15 minutes; seek medical attention
Skin Contact: remove with soap and water: if redness or rash develops seek medical attention: Launder contaminated clothing before reuse.
Ingestion: do not induce vomiting; seek medical attention
After first aid, get appropriate in-plant, paramedic, or community medical support.

Section 5 - Fire-Fighting Measures

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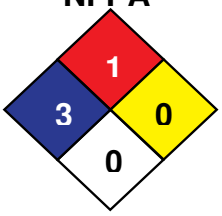

Flash Point: 249.8°F (121°C) PMCC
Flammability Classification: Combustible Liquid, Class III
Extinguishing Media: Foam, Dry Chemical, and Carbon Dioxide
Unusual Fire or Explosion Hazards: None
Hazardous Combustion Products: May generate Ammonia gas, Oxides of Nitrogen and Carbon when burned
Fire-Fighting Instructions: Do not release runoff from fire control methods to sewers or waterways.
Fire-Fighting Equipment: Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

Section 6 - Accidental Release Measures

Spill /Leak Procedures
Containment: Dike and contain for later disposal. Do not release into sewers or waterways.
Cleanup: Clean-up personnel must be equipped with self-contained breathing apparatus and butyl rubber protective clothing.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).

Section 7 - Handling and Storage

Handling Precautions: Avoid prolonged or repeated eye and skin contact. Avoid breathing vapors and use only with adequate ventilation. Use good general housekeeping procedures.
Storage Requirements: Keep away from oxidizers. Store in Closed containers. Use only with adequate ventilation.

Section 8 - Exposure Controls / Personal Protection

Respiratory Protection: Follow OSHA respirator regulations 29 CFR 1910.134 and European Standards EN 141, 143 and 371; wear an MSHA/NIOSH or European Standards EN 141, 143 and 371 approved respirators. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Wear chemically protective gloves, boots, and aprons to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations 29 CFR 1910.133 and European Standard EN166. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics .

Section 9 - Physical and Chemical Properties

Physical State:
Appearance and Odor: Yellow liquid, ammonia odor
Viscosity: 9.5 cSt @ 77°F (25°C)
Vapor Density (Air=1): >1
Specific Gravity (H_2O=1, at 4 °C): 0.95

Water Solubility: No Data
Boiling Point: 500°F (260°C)
Freezing/Melting Point: No Data
VOC content: 25%
pH: 11.7

Section 10 - Stability and Reactivity

Stability: This material is stable at room temperature in closed containers under normal storage and handling conditions.
Polymerization: Under normal conditions hazardous polymerization cannot occur.
Chemical Incompatibilities: Strong oxidizing agents, strong Lewis or mineral acids.
Hazardous Decomposition Products: Thermal oxidative decomposition of can produce: Ammonia gas, Oxides of Nitrogen and Carbon when burned.

Section 11- Toxicological Information

Eye Effects: will cause burns
Skin Effects: will cause burns
Acute Toxicity Effects Data:
Oral LD50 (rat): 2885 mg/kg
Dermal LD50 (rabbit): 2980 mg/kg

Mutagenicity: No Data
Teratogenicity: No Data

Section 12 - Ecological Information

Aquatic Ecotoxicity: Fish Acute LC50 >220 mg/L; 96 hours exposure

This material is not readily biodegradable.

Section 13 - Disposal Considerations

Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable federal, state, and local regulations.

Section 14 - Transport Information

DOT

Shipping Name:
Amines, liquid, corrosive n.o.s. (Polyoxypropylene diamine)
UN 2735
Hazard Class: 8
Packing Group: III
Label: Corrosive

IATA

Shipping Name:
Amines, liquid, corrosive n.o.s. (Polyoxypropylene diamine)
UN 2735
Hazard Class: 8
Packing Group: III
Label: Corrosive

IMDG

Shipping Name:
Amines, liquid, corrosive n.o.s. (Polyoxypropylene diamine)
UN 2735
Hazard Class: 8
Packing Group: III
Label: Corrosive

Section 15 - Regulatory Information

EPA REGULATIONS:

SARA 312 (40 CFR #70) Hazard Classification: Acute Health Hazard, Chronic Health Hazard

SARA Title III Section 313 (40 CFR 372): None

TSCA Inventory Status (40CFR710): All components of this formula are on the TSCA inventory

California Proposition 65: This product does not intentionally contain any chemicals which have been identified by the state of California to cause cancer, birth defects or other reproductive harm.

CANADIAN REGULATIONS:
WHMIS Identification: Class E: Corrosive
CDSL/NDL (Canadian Domestic Substance List/Non Domestic Substance List): **Listed on CDSL**

Labeling according to EEC Directive

Risk Phrases	Symbol(s) Required for EU Label	Safety Phrases
R21: Harmful to skin **R22:** Harmful if swallowed **R34:** Causes burns. **R36:** Irritating to eyes. **R37:** Irritating to respiratory system. **R38:** Irritating to skin	 **(C: Corrosive)**	**S26:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice **S36/37/38:** Wear suitable protective clothing, gloves, and eye face/protection. **S38:** In case of insufficient ventilation, wear suitable respiratory equipment. **S45:** In case of an accident or if you feel sick, seek medical attention. **S61**: Avoid release to the environment.

16 - Other Information

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