

PRODUCT NAME: ABRO Epoxy Clear Syringe - Resin
PRODUCT NUMBER/SIZE: EP-300 / 25 mL

Revision Date: 04/28/2015

SECTION 1 Identification of the Substance and of the Company/Undertaking

MANUFACTURER'S NAME: ABRO INDUSTRIES, INC.

ADDRESS: 3580 Blackthorn Court
South Bend, IN 46628
USA

PRODUCT DESCRIPTION: Epoxy

COMPANY PHONE: 574-232-8289

EMERGENCY 24-HR TELEPHONE: Chemtrec: US/Canada 1-800-424-9300
International +1-703-527-3887

SECTION 2 Hazards Identification

Classification:

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1

Label Pictogram(s):



Signal Word: WARNING

Hazard Phrases: Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction.

Precautionary Phrases: Wear eye/face protection. Wash face, hands and any exposed skin thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace.

Response: Specific treatment (see supplemental first aid instructions on this label). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Storage / Disposal: Dispose of contents/container to an approved waste disposal plant.

Other: Toxic to aquatic life with long lasting effects. Contains epoxy constituents with an average molecular weight of ≤ 700 .

Unknown acute toxicity: 100% of the mixture consists of ingredient(s) of unknown toxicity.

SECTION 3

Composition/Information on Ingredients

<u>CHEMICAL NAME</u>	<u>CAS NO.</u>	<u>Weight %</u>	<u>TRADE SECRET</u>
EPOXY RESIN (EPICHLOROHYDRIN, BISPHENOL A)	25085-99-8	60 - 100%	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4

First Aid Measures

Description of First Aid Measures

General advice: Get medical advice/attention if you feel unwell.

Eye contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin contact: IF ON SKIN: Wash with soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.

Ingestion IF SWALLOWED. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider: Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms See section 2 for more information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

SECTION 5

Fire Fighting Measures

Suitable extinguishing media: Carbon dioxide (CO₂), Dry chemical, Foam

Unsuitable extinguishing media: None.

Specific hazards arising from the chemical:	None in particular.	
Explosion data:	Sensitivity to Mechanical Impact	None.
	Sensitivity to Static Discharge	None.
Protective equipment and precautions for firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.	

SECTION 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Personal precautions:	Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Use personal protective equipment as required.
Environmental precautions:	Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up:

Methods for containment:	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up:	Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.
Prevention of secondary hazards:	Clean contaminated objects and areas thoroughly observing environmental regulations.

SECTION 7 Handling and Storage

Precautions for Safe Handling

Advice on safe handling:	Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use personal protective equipment as required.
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Conditions for safe storage, including any incompatibilities:

Storage Conditions:	Keep containers tightly closed in a dry, cool and well-ventilated place.
Incompatible materials:	Strong oxidizing agents, Acids, Bases, Amines

SECTION 8 Exposure Controls/Personal Protection

Appropriate engineering controls

Engineering Controls	Showers
	Eyewash stations
	Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection:	Wear safety glasses with side shields (or goggles).
Skin and body protection:	Wear protective gloves and protective clothing.
Respiratory protection:	Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.
General Hygiene Considerations:	Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

SECTION 9 Physical and Chemical Properties

Physical State:	Viscous liquid
Appearance:	Amber
Odor:	Slight
Odor Threshold:	No information available.
pH:	Neutral
Melting Point/Freezing Point:	No information available.
Boiling Point/Boiling Range:	> 260 °C / 500 °F
Flash Point:	252 °C / 486 °F Pensky-Martens Closed Cup (PMCC)
Evaporation rate:	No information available.
Flammability (solid, gas):	No information available.
Flammability Limit in Air	
Upper Flammability Limit:	No information available.
Lower Flammability Limit:	No information available.
Vapor pressure:	0.03 mbar @ 77°C (171°F)
Vapor density:	>1 Air = 1
Relative density:	1.16
Water Solubility:	Insoluble in water
Solubility in other solvents:	No information available.
Partition Coefficient:	3.242
Autoignition Temperature:	No information available.
Decomposition Temperature:	No information available.
Kinematic Viscosity:	No information available.
Dynamic Viscosity:	11,000-14,000 mPa.s @25°C
Exposive Properties:	Not applicable.
Oxidizing Properties:	Not applicable.
 Other Information	
Softening point:	No information available.
Molecular weight:	No information available.
VOC Content (%):	0
Density:	No information available.
Bulk density:	No information available.

SECTION 10

Stability and Reactivity

Reactivity	No data available.
Chemical Stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	None under normal processing.
Conditions to avoid:	Excessive heat.
Incompatible materials:	Strong oxidizing agents, Acids, Bases, Amines
Hazardous decomposition products:	Carbon oxides

SECTION 11

Toxicological Information

Information on likely routes of exposure:

Inhalation:	May cause irritation of respiratory tract.
Eye contact:	Contact with eyes may cause irritation. May cause redness and tearing of the eyes.
Skin contact:	May cause skin irritation and/or dermatitis. May cause sensitization by skin contact.
Ingestion:	Ingestion may cause irritation to mucous membranes.

Information on toxicological effects

Symptoms	No information available.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.

SECTION 12

Ecological Information

Ecotoxicity:

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Persistence and Degradability:	No information available.
Bioaccumulation Potential:	No information available.
Mobility:	No information available.
Other Adverse Effects:	No information available.

SECTION 13 Disposal Considerations

Waste treatment methods

Disposal of wastes: Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging: Do not reuse container.

US EPA Waste Number: Not applicable.

SECTION 14 Transport Information

DOT

Proper shipping name: Not regulated

IATA

UN/ID no: 3082
Proper shipping name: Environmentally hazardous substances, liquid, n.o.s. (Epoxy resin)
Hazard Class: 9
ERG Code: 9L

IMDG

UN/ID no: 3082
Proper shipping name: Environmentally hazardous substances, liquid, n.o.s. (Epoxy resin)
Hazard Class: 9
EmS-No: F-A, S-F

SECTION 15 Regulatory Information

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Not Listed.
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

U.S. EPA Label Information

EPA Pesticide Registration Number: Not applicable

NFPA	Health hazards 2	Flammability 1	Instability 0	
HMIS	Health hazards 2	Flammability 1	Physical hazards 0	Personal protection B

NFPA (National Fire Protection Association)
HMIS (Hazardous Material Information System)

SECTION 16

Other Information

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

ABBREVIATIONS:

NG="NOT GIVEN"

<="LESS THAN"

ND = Not Determined

BT="BETWEEN"

>="GREATER THAN"

NA = Not Applicable

PRODUCT NAME: ABRO Epoxy Clear Syringe - Hardener
PRODUCT NUMBER/SIZE: EP-300 / 25 mL

Revision Date: 04/28/2015

SECTION 1 Identification of the Substance and of the Company/Undertaking

MANUFACTURER'S NAME: ABRO INDUSTRIES, INC.

ADDRESS: 3580 Blackthorn Court
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USA

PRODUCT DESCRIPTION: Epoxy

COMPANY PHONE: 574-232-8289

EMERGENCY 24-HR TELEPHONE: Chemtrec: US/Canada 1-800-424-9300
International +1-703-527-3887

SECTION 2 Hazards Identification

Classification:

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A

Label Pictogram(s):



Signal Word: WARNING

Hazard Phrases: Causes skin irritation. Causes serious eye irritation

Precautionary Phrases: Wash face, hands and any exposed skin thoroughly after handling. Wear eye/face protection.

Response: Specific treatment (see supplemental first aid instructions on this label). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Storage / Disposal: Dispose of contents/container to an approved waste disposal plant.

Other: Unknown acute toxicity: 100% of the mixture consists of ingredient(s) of unknown toxicity.

SECTION 3

Composition/Information on Ingredients

<u>CHEMICAL NAME</u>	<u>CAS NO.</u>	<u>Weight %</u>	<u>TRADE SECRET</u>
MERCAPTAN AMINE BLEND (TSRN 679485-6533P)	-	60 - 100%	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4

First Aid Measures

Description of First Aid Measures

General advice: Get medical advice/attention if you feel unwell.

Eye contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin contact: IF ON SKIN: Wash with soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.

Ingestion IF SWALLOWED. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider: Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms See section 2 for more information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

SECTION 5

Fire Fighting Measures

Suitable extinguishing media: Carbon dioxide (CO2), Dry chemical, Foam

Unsuitable extinguishing media: None.

Specific hazards arising from the chemical: None in particular.

Explosion data:

Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.

Protective equipment and precautions for firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:

Personal precautions:

Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Use personal protective equipment as required.

Environmental precautions:

Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up:

Methods for containment: Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

Prevention of secondary hazards: Clean contaminated objects and areas thoroughly observing environmental regulations.

SECTION 7 Handling and Storage

Precautions for Safe Handling

Advice on safe handling:

Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities:

Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials: Strong oxidizing agents, Acids, Alkali

SECTION 8 Exposure Controls/Personal Protection

Appropriate engineering controls

Engineering Controls
Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection: Wear safety glasses with side shields (or goggles).
Skin and body protection: Wear protective gloves and protective clothing.
Respiratory protection: Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.

General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

SECTION 9 Physical and Chemical Properties

Physical State:	Liquid
Appearance:	Clear, yellow
Odor:	Mercaptan
Odor Threshold:	No information available.
pH:	Not applicable.
Melting Point/Freezing Point:	No information available.
Boiling Point/Boiling Range:	No information available.
Flash Point:	> 93 °C / > 200 °F Pensky-Martens Closed Cup (PMCC)
Evaporation rate:	No information available.
Flammability (solid, gas):	No information available.
Flammability Limit in Air	
Upper Flammability Limit:	No information available.
Lower Flammability Limit:	No information available.
Vapor pressure:	No information available.
Vapor density:	No information available.
Relative density:	1.13
Water Solubility:	Insoluble in water.
Solubility in other solvents:	No information available.
Partition Coefficient:	No information available.
Autoignition Temperature:	No information available.
Decomposition Temperature:	No information available.
Kinematic Viscosity:	No information available.
Dynamic Viscosity:	No information available.
Exposive Properties:	No information available.
Oxidizing Properties:	No information available.
Other Information	
Softening point:	No information available.
Molecular weight:	No information available.
VOC Content (%):	0
Density:	No information available.
Bulk density:	No information available.

SECTION 10 Stability and Reactivity

Reactivity	No data available.
Chemical Stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	None under normal processing.
Conditions to avoid:	Excessive heat.
Incompatible materials:	Strong oxidizing agents, Acids, Alkali

Hazardous decomposition products: Carbon oxides
Nitrogen oxides (NOx)
Oxides of sulfur
Hydrogen sulfide

SECTION 11 Toxicological Information

Information on likely routes of exposure:

Inhalation: May cause irritation of respiratory tract.

Eye contact: Contact with eyes may cause irritation. May cause redness and tearing of the eyes.

Skin contact: May cause skin irritation and/or dermatitis.

Ingestion: Ingestion may cause irritation to mucous membranes.

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity No information available.

SECTION 12 Ecological Information

Ecotoxicity:

100% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Persistence and Degradability: No information available.

Bioaccumulation Potential: No information available.

Mobility: No information available.

Other Adverse Effects: No information available.

SECTION 13 Disposal Considerations

Waste treatment methods

Disposal of wastes: Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging: Do not reuse container.

US EPA Waste Number: Not applicable.

SECTION 14
Transport Information**DOT**

Proper shipping name: Not regulated

IATA

UN/ID no: 3334

Proper shipping name: Environmentally hazardous substances, liquid, n.o.s.
(Mercaptan mixture)

Hazard Class: 9

ERG Code 9L

IMDG

Proper shipping name: Not regulated

SECTION 15
Regulatory Information

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Not determined
ENCS	Not determined
IECSC	Not determined
KECL	Not determined
PICCS	Not determined
AICS	Not determined

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

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AICS - Australian Inventory of Chemical Substances

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

U.S. EPA Label Information

EPA Pesticide Registration Number: Not applicable

NFPA	Health hazards 2	Flammability 1	Instability 0	
HMIS	Health hazards 2	Flammability 1	Physical hazards 0	Personal protection B

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

SECTION 16

Other Information

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

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