

TEAM[®] Industrial Services
SAFETY DATA SHEET

1. Product and Company Identification

Material name B-400 Catalyst
Version # 00
Issue date 11-September-2013
Revision date 11-September-2013
Supersedes date -
Chemical description Catalyst
CAS # Mixture
Product code 903-0009
Product use Industrial Leak Sealant.
Manufacturer information
Manufacturer/Supplier Team Industrial Services, Inc.
Address 200 Hermann Drive, Alvin, Texas 77511, US
Emergency telephone number CHEMTREC - 24 HOURS
USA: CHEMTREC: 800-424-9300
International: 703-527-3887 (Collect)

2. Hazards Identification

Physical state Liquid.
Appearance Blue liquid.
Emergency overview DANGER
Causes skin, eye and digestive tract burns. Causes severe respiratory tract irritation. May cause allergic skin reaction.
OSHA regulatory status This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects
Routes of exposure Eye contact. Ingestion. Inhalation. Skin contact.
Eyes Causes eye burns.
Skin Causes skin burns. May cause allergic skin reaction.
Inhalation Causes severe respiratory tract irritation.
Ingestion Causes digestive tract burns.
Target organs Eyes. Respiratory system. Skin. Digestive tract.
Chronic effects Possible reproductive hazard that may cause adverse reproductive effects based on animal data.
Signs and symptoms Skin and eye burns. May cause severe irritation or burns to the eyes, skin, gastrointestinal tract, and respiratory system. Sensitization. Ingestion may cause irritation and malaise.
Potential 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.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Bisphenol A	80-05-7	15
Modified polyamido amine	68953-36-6	13
Diethylenetriamine	111-40-0	8
2-Ethylhexyl glycidyl ether	2461-15-6	7
2-Piperazin-1-ylethylamine	140-31-8	6
Amine Adduct	68605-86-7	5

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 Flush thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention immediately.

Skin contact Remove contaminated clothing. Wash immediately with soap and water for at least 15 minutes. Get medical attention immediately! In case of allergic reaction or other skin disorders: Seek medical attention and bring along these instructions.

Inhalation Remove to fresh air. If breathing stops, provide artificial respiration. Get medical attention immediately.

Ingestion Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and take these instructions.

Notes to physician Treat symptomatically.

General advice Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Chemical burns must be treated by a physician.

5. Fire Fighting Measures

Flammable properties No unusual fire or explosion hazards noted.

Extinguishing media

Suitable extinguishing media Extinguish with foam, carbon dioxide or dry powder.

Unsuitable extinguishing media No restrictions known.

Protection of firefighters

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

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

Fire fighting equipment/instructions Use standard firefighting procedures and consider the hazards of other involved materials. Cool material exposed to heat with water spray and remove it if no risk is involved.

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

Hazardous combustion products Ammonia. Carbon oxides. Cyanide compounds. Formaldehyde. Nitrogen oxides (NOx).

6. Accidental Release Measures

Personal precautions Avoid inhalation of vapors and contact with skin and eyes. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see Section 8 of the MSDS.

Environmental precautions Prevent entry into waterways, sewer, basements or confined areas. Environmental manager must be informed of all major spillages.

Methods for containment Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Collect and dispose of spillage as indicated in Section 13 of the MSDS.

Methods for cleaning up Wipe up with absorbent material (e.g. cloth, fleece). Prevent product from entering drains. Never return spills in original containers for re-use. Should not be released into the environment.

Other information Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling Provide adequate ventilation. Avoid inhalation of vapors and contact with skin and eyes. Wear personal protective equipment. Wash hands thoroughly after handling. Pregnant women should not work with the product, if there is the least risk of exposure. Persons susceptible for allergic reactions should not handle this product. Observe good industrial hygiene practices.

Storage Store in tightly closed original container. Store in a cool and well-ventilated place. Store away from incompatible materials.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
Diethylenetriamine (CAS 111-40-0)	TWA	1 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Diethylenetriamine (CAS 111-40-0)	TWA	4.2 mg/m ³
		1 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Diethylenetriamine (CAS 111-40-0)	TWA	1 ppm

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

Components	Type	Value
Diethylenetriamine (CAS 111-40-0)	TWA	1 ppm

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

Components	Type	Value
Diethylenetriamine (CAS 111-40-0)	TWA	4.2 mg/m ³
		1 ppm

Mexico. Occupational Exposure Limit Values

Components	Type	Value
Diethylenetriamine (CAS 111-40-0)	TWA	4.2 mg/m ³
		1 ppm

Exposure guidelines No exposure standards allocated.

Canada - Alberta OELs: Skin designation

Diethylenetriamine (CAS 111-40-0) Can be absorbed through the skin.

Canada - British Columbia OELs: Skin designation

Diethylenetriamine (CAS 111-40-0) Can be absorbed through the skin.

Canada - Manitoba OELs: Skin designation

Diethylenetriamine (CAS 111-40-0) Can be absorbed through the skin.

Canada - Ontario OELs: Skin designation

Diethylenetriamine (CAS 111-40-0) Can be absorbed through the skin.

Canada - Quebec OELs: Skin designation

Diethylenetriamine (CAS 111-40-0) Can be absorbed through the skin.

Canada - Saskatchewan OELs: Skin designation

Diethylenetriamine (CAS 111-40-0) Can be absorbed through the skin.

Mexico OELs: Skin designation

Diethylenetriamine (CAS 111-40-0) Can be absorbed through the skin.

US - California OELs: Skin designation

Diethylenetriamine (CAS 111-40-0) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Diethylenetriamine (CAS 111-40-0) Can be absorbed through the skin.

US. NIOSH: Pocket Guide to Chemical Hazards

Diethylenetriamine (CAS 111-40-0) Can be absorbed through the skin.

Engineering controls General ventilation normally adequate. Ensure adequate ventilation, especially in confined areas. Provide easy access to water supply and eye wash facilities.

Personal protective equipment

Eye / face protection	Wear approved chemical safety goggles. Use face shield in case of splash risk.
Skin protection	Wear chemical-resistant gloves, footwear and protective clothing appropriate for risk of exposure. Contact chemical protective clothing manufacturer for specific information.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134.
General hygiene considerations	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. Observe any medical surveillance requirements.

9. Physical & Chemical Properties

Appearance	Blue liquid.
Physical state	Liquid.
Form	Liquid.
Color	Blue. Odor Odorless.
Odor threshold	Not available.
pH	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Boiling point	> 149 °F (> 65 °C)
Melting point/Freezing point	Not available.
Solubility (water)	Not available.
Specific gravity	1
Flash point	> 212.0 °F (> 100.0 °C) Closed Cup
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	Not available.
Viscosity	5500 cSt
Other data	
Flammability (solid, gas)	Not applicable.

10. Chemical Stability & Reactivity Information

Chemical stability	The product is stable and non reactive under normal conditions of use, storage and transport.
Conditions to avoid	Exposure to temperatures of 572 °F (300°C) and above.
Incompatible materials	Strong acids. Strong oxidizing agents. Aldehydes. Ketones. Organic halides.
Hazardous decomposition products	Carbon dioxide. Carbon oxides. Nitrogen oxides. Ammonia.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
Bisphenol A (CAS 80-05-7)		
Acute		
<i>Oral</i>		
LD50	Rat	3300 mg/kg

Sensitization	May cause allergic skin reaction.
Acute effects	Causes skin, eye and digestive tract burns.
Local effects	Causes skin, eye and digestive tract burns. Causes severe respiratory tract irritation.
Chronic effects	May cause allergic skin reaction.
Carcinogenicity	Not classified.
Epidemiology	No data available.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Neurological effects	No data available.
Reproductive effects	Suspected of damaging fertility.
Teratogenicity	No data available to indicate product or any components present at greater than 0.1% may cause birth defects.
Symptoms and target organs	Skin and eye burns. May cause severe irritation or burns to the eyes, skin, gastrointestinal tract, and respiratory system. Sensitization. Upper respiratory tract irritation. Ingestion may cause irritation and malaise.
Further information	No data available.

12. Ecological Information

Ecotoxicological data

Components	Species	Test Results
2-Piperazin-1-ylethylamine (CAS 140-31-8)		
Aquatic		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 1950 - 2460 mg/l, 96 hours
Bisphenol A (CAS 80-05-7)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) 9.2 - 11.4 mg/l, 48 hours
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 3.6 - 5.4 mg/l, 96 hours
Ecotoxicity	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.	
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.	
Persistence and degradability	No data available.	
Bioaccumulation / Accumulation		
Partition coefficient		
Bisphenol A (CAS 80-05-7)	3.32	
Mobility in environmental media	The product is soluble in water.	

13. Disposal Considerations

Waste codes	D002: Corrosive waste
Disposal instructions	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

DOT

Basic shipping requirements:

UN number	UN2735
Proper shipping name	Polyamines, liquid, corrosive, n.o.s. (Modified polyamido amine, Diethylenetriamine)
Hazard class	8
Packing group	III
Special precautions	Read safety instructions, MSDS and emergency procedures before handling.

Additional information:

Special provisions IB3, T7, TP1, TP28
Packaging exceptions 154
Packaging non bulk 203
Packaging bulk 241

IATA

UN number UN2735
UN proper shipping name POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Modified polyamido amine, Diethylenetriamine)
Transport hazard class(es) 8
Packing group III
Environmental hazards No
Labels required 8
ERG code 8L
Special precautions for user Read safety instructions, MSDS and emergency procedures before handling.

IMDG

UN number UN2735
UN proper shipping name POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Modified polyamido amine, Diethylenetriamine)
Transport hazard class(es) 8
Packing group III
Environmental hazards
Marine pollutant No
Labels required 8
EmS F-A, S-B
Special precautions for user Read safety instructions, MSDS and emergency procedures before handling.

TDG

UN number UN2735
Proper shipping name POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Modified polyamido amine, Diethylenetriamine)
Hazard class 8
Packing group III
Marine pollutant No
Special provisions 16
Labels required 8

15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 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.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Bisphenol A (CAS 80-05-7)

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Bisphenol A (CAS 80-05-7) 1.0 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Bisphenol A (CAS 80-05-7) Listed.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

None

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 CFR 355, Appendix A) No

SARA 311/312 Hazardous chemical Yes

Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)

Not controlled

Canadian regulations

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS status

Controlled

WHMIS classification

D2A - Other Toxic Effects-VERY TOXIC
D2B - Other Toxic Effects-TOXIC
E - Corrosive

WHMIS labeling



Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
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
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).

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

Diethylenetriamine (CAS 111-40-0) Listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

US - New Jersey RTK - Substances: Listed substance

2-Piperazin-1-ylethylamine (CAS 140-31-8) Listed.

Bisphenol A (CAS 80-05-7) Listed.

Diethylenetriamine (CAS 111-40-0) Listed.

US. Massachusetts RTK - Substance List

2-Piperazin-1-ylethylamine (CAS 140-31-8) Listed.

Bisphenol A (CAS 80-05-7) Listed.

Diethylenetriamine (CAS 111-40-0) Listed.

US. New Jersey Worker and Community Right-to-Know Act

Bisphenol A (CAS 80-05-7) 500 lbs

US. Pennsylvania RTK - Hazardous Substances

2-Piperazin-1-ylethylamine (CAS 140-31-8) Listed.

Bisphenol A (CAS 80-05-7) Listed.

Diethylenetriamine (CAS 111-40-0) Listed.

16. Other Information

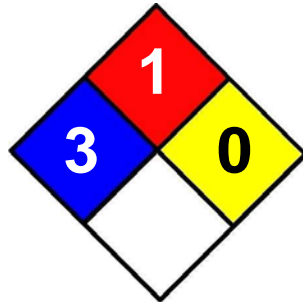
Further information

HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings

Health: 3*
Flammability: 1
Physical hazard: 0

NFPA Ratings



Disclaimer

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