

FX-752 Epoxy Bonding Agent

SAFETY DATA SHEET



1. Identification

Product Identification

Product Identifier: A Component FX-752 (FX752-1QTA, FX-752-1A, FX752-5A)
Recommended Use: Two-Component, Epoxy Bonding Agent – Component A
Use Restrictions: For industrial use only.

Company Identification

Company: Simpson Strong-Tie Company Inc.
Address: 5956 W. Las Positas Blvd.
 Pleasanton, CA 94588 USA
Phone: 1-800-999-5099
Website: www.strongtie.com
Emergency: 1-800-535-5053 (US/Canada) / 1-352-323-3500 (International)
 For most current SDS, please visit our website at www.strongtie.com/sds.

2. Hazard Identification

General Information

FX-752 is a two part system. The two parts of this product have been assessed according to GHS. This Safety Data Sheet covers hazards and responses for Component A. See Component B Safety Data Sheet for complete product information.

Component A GHS Classification



Physical Hazards:	Not Classified.	
Health Hazards:	Skin Corrosion/Irritation	Category 2
	Serious Eye Damage/Irritation	Category 2A
	Sensitization, Skin	Category 1
Environmental Hazards:	Acute Aquatic Environmental Hazard	Category 2
	Chronic Aquatic Environmental Hazard	Category 2
Signal Word:	WARNING!	
Hazard Statements:	Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.	
Precautionary Statements:		
Prevention:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing mist or vapor. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment.	
Response:	If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before re-use. 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. Collect Spillage.	
Storage:	Store locked up. Store in a well-ventilated place. Keep cool.	
Disposal:	Dispose of contents/container in accordance with local/regional/national regulations.	

Hazards Not Otherwise Classified (HNOC)

The above hazards are for the uncured A component of FX-752. Upon combination with the B component of FX-752 an innocuous solid coating is formed which does not present any immediate hazards. Upon grinding or cutting through the cured coating the following hazards may apply.



Health Hazard:	Carcinogenicity	Category 1A
	STOT, Repeated Exposure	Category 2 (Lung)
Hazard Statements:	May cause cancer. May cause damage to organs (lung) through prolonged or repeated exposure (processing dust).	
Precautionary Statements:	Do not breathe dust.	

3. Composition Information

General Information

This product is a mixture. Hazardous ingredients for each component are listed below. May include other nonhazardous ingredients. May include other trace ingredients, see Section 15.

Composition – All concentrations are in percent by weight unless otherwise indicated.

Chemical Name	CAS Number	Weight %
Bisphenol A-Epichlorohydrin (Epoxy Resin)	25068-38-6	75-95
Alkyl (C12-C14) Glycidyl Ether	68609-97-2	5-25

4. First-Aid Measures

General Information

Provide general supportive measures and treat symptomatically. Symptoms may be delayed. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If exposed or concerned: Get medical advice/attention. Wash contaminated clothing before reuse.

Routes of Exposure

- Eye Contact:** Immediately flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open. Remove contact lenses if present and easy to do. If redness, burning, blurred vision, or swelling persists, **consult a physician.**
- Skin Contact:** Remove contaminated clothing and product, immediately wash affected area with soap and water. Do not apply greases or ointments. If rash or irritation persists **consult a physician.**
- Ingestion:** Rinse mouth immediately. Do not induce vomiting. **Consult a physician.**
- Inhalation:** Remove patient to fresh air. Give oxygen or artificial respiration if needed. If patient continues to experience difficulty breathing, **consult a physician.**

Most Important Symptoms

Irritant effects. Sensitization. Symptoms include itching, burning, redness and tearing.

5. Fire-Fighting Measures

- Suitable Extinguishing Media:** Extinguish with foam, carbon dioxide, dry powder, or water fog.
- Additional Information:** None known.
- Hazards during Fire-Fighting:** Hazardous decomposition products may occur when materials polymerize at temperatures above 500°F (260°C). Do not allow run-off from fire-fighting to enter drains or water courses.
- Fire-Fighting Procedures:** Use standard fire-fighting procedures and consider the hazards of other involved materials. In case of fire and/or explosion do not breathe fumes. Self-contained breathing apparatus and full protective clothing must be worn. Move containers from fire area if you can do so without risk. Cool containers with flooding quantities of water until well after fire is out. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. Accidental Release Measures

Personal Precautions

Keep unnecessary personnel away. Eliminate all ignition sources (no smoking, flares, sparks, or open flames). Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Clean-Up Methods

- Small spills:** Wipe up with absorbent material (e.g. cloth, fleece). Place in leak-proof containers. Seal tightly for proper disposal. Clean surface thoroughly to remove residual contamination.
- Large spills:** Stop the flow of material, if this is without risk. Dike far ahead of spill to contain material. Use a non-combustible material like vermiculite, sand or earth to soak up the product. Place in leak-proof containers. Seal tightly for proper disposal. Following product recovery, flush area with water. Prevent entry into waterways, sewer, basements or confined areas.

Environmental Precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so.

7. Handling and Storage

Handling

Mechanical ventilation or local exhaust ventilation is recommended. Keep away from open flames, hot surfaces and sources of ignition. Wear appropriate personal protective equipment. Pregnant women should not work with the product, if there is the least risk of exposure. When using, do not eat, drink or smoke. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Observe good industrial hygiene practices.

Storage

Store in a closed container away from incompatible materials (see section 10). Keep in original container. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Keep away from heat and sources of ignition. Store in a well-ventilated place. Protect against physical damage. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Personal Protective Equipment

Protective Measure: Wear appropriate personal protective equipment.
Eye Protection: Wear chemical splash goggles or safety glasses with side shield.
Hand Protection: Wear chemical-resistant gloves such as: Nitrile, neoprene, butyl.
Skin and Body Protection: Wear long sleeve shirt/long pants and other clothing as required to minimize contact.
Respirator Protection: A respirator is not required during normal use of this product in properly ventilated areas. Approved respirators should be worn when workplace conditions warrant respirator use.
General Hygiene: 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.

Engineering Controls

If exposure limits have not been established, maintain airborne levels to an acceptable level. When using indoors good general ventilation should be used. Provide eyewash station and emergency shower.

Exposure Limits

No exposure limits noted for components.

9. Physical and Chemical Properties

Physical State:	Liquid	Freezing/Melting Point:	N/E
Form:	Paste	Boiling Point:	>428°F (>220°C)
Color:	Clear Amber	Flash Point:	>250°F (>121°C)
Odor:	Sweet	Evaporation Rate:	N/A
Odor Threshold:	N/E	Specific Gravity:	1.13
pH:	N/E	VOC (A+B):	4 g/L
Flammability:	N/E	U/L Flammability:	N/E
Vapor Pressure:	Not Volatile	Vapor Density:	N/E
Solubility:	Insoluble	Kow:	N/E
Decomposition:	N/E	Viscosity:	N/E

10. Stability and Reactivity

Reactivity: This product is stable and non-reactive under normal conditions.
Chemical Stability: Stable under normal storage conditions.
Condition to Avoid: High heat and open flame.
Substances to Avoid: Oxidizing agents, acids, organic bases, and amines.
Hazardous Reactions: Hazardous polymerization will not occur.
Decomposition Products: Carbon dioxide, carbon monoxide, oxides of nitrogen and other organic compounds.

11. Toxicological Information

Likely Routes of Exposure

Ingestion: Ingestion may cause irritation to the gastrointestinal tract.
Inhalation: This material is a viscous liquid to semi-solid which does not easily form vapors.
Skin contact: Causes skin irritation. May cause an allergic skin reaction.
Eye contact: Causes serious eye irritation.

Information on Toxicological Effects

Acute toxicity: Not expected to be acutely toxic.

Component	Species	Test Result
Bisphenol-A-(Epichlorohydrin) (CAS 25068-38-6)	Rat	>5000 mg/kg
	Rabbit	>2000 mg/kg

Skin corrosion/irritation: Causes skin irritation.
Eye damage/eye irritation: Causes serious eye irritation.
Respiratory sensitization: No data available.
Skin sensitization: May cause an allergic skin reaction.
Germ cell mutagenicity: The available data does not indicate that any components of this product present at greater than 0.1% is mutagenic or genotoxic.
Carcinogenicity: May cause cancer. The B components of this product contain components that are listed carcinogens. These components are considered carcinogens only in their inhalable form. Due to the nature of this product inhalation is highly unlikely. Exposure to respirable carcinogens is likely only when grinding or cutting cured product, ensure good work practice and use of personal protective equipment as needed to control exposure to processing dust.
IARC Monographs. Overall Evaluation of Carcinogenicity
 Quartz (14808-60-7) 1 Carcinogenic to humans.
 Titanium Dioxide (13463-67-7) 2B Possibly Carcinogenic to humans.
 Phenol (CAS 108-95-2) 3 Not classifiable as to carcinogenicity in humans.
NTP Report on Carcinogens
 Quartz (14808-60-7) Known to be Human Carcinogen.
Reproductive toxicity: No data available.
Aspiration hazard: No data available.
Specific target organ toxicity:
 Single exposure No data available.
 Repeated exposure No data available.

Further Information

Toxicological, ecotoxicological, physical, and chemical properties may not have been fully investigated. Hazard data above is estimated based on best available information. Some workers with certain pre-existing medical conditions such as: asthma, allergies, or impaired pulmonary and/or liver functions, or who may be particularly susceptible to this material, may be affected by exposure to this material.

12. Ecological Information

General Information

Information given is based on data on the components and the ecotoxicology of similar products. The product is classified as toxic to aquatic life with long lasting effects. Avoid release to the environment.

Supporting Data

Component	Species	Test Result
Bisphenol-A-(Epichlorohydrin) (Epoxy Resin) (CAS 25068-38-6)	Salmo gairdneri	1.5 mg/l, 96 hours
	Daphnia magna	2.7 mg/l, 48 hours

Persistence and degradability: This product is not expected to be readily biodegradable.
Bioaccumulative potential: No data available for this product.
Mobility in soil: This product is insoluble in water and is non-volatile.

Other Adverse Effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

13. Disposal Considerations

Waste Disposal of Substance: Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

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Container Disposal: Empty containers or liners may retain some product residues; follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transportation Information

FX-752 Component A is not regulated for ground transportation by the USDOT; check specific requirements for other regions and other shipping methods.

UN number:	UN3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol-A Epichlorohydrin Resin), 9, III, Marine Pollutant
Transportation Class:	9
Precautions:	Other Hazard
Packing Group:	III
Environment Hazard?	Yes
Required Labels:	9
ERG Code (IATA):	9L
EmS (IMDG):	F-A, S-F

Additional Information

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: This substance/mixture is not intended to be transported in bulk.

This information does not cover all specific regulatory or operational requirements of this product. The classifications for transportation may vary by container volume or different regional or national regulations.

15. Regulatory Information

United States

Federal Regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.
CERCLA Hazardous Substance List (40 CFR 302.4): Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories:				
Immediate	Delayed	Fire	Pressure	Reactivity
Yes	Yes	No	No	No

SARA 302 Extremely hazardous substance: No
SARA 311/312 Hazardous chemical: Yes
SARA 313 (TRI reporting): Not regulated.

This product does not contain known levels of any chemicals known to the State of California to cause cancer or reproductive harm as per California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986).

Canada

This product has been classified according to the hazard criteria of the CPR and the SDS contains all of the information required by the CPR.

WHMIS Classification

Class D-2B: Material Causing other toxic effects

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International

The product is classified and labeled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

This product is not subject to or not applicable for any of the following International Regulations; **Stockholm Convention, Rotterdam Convention, Kyoto Protocol, Montreal Protocol, Basel Convention.**

International Inventories

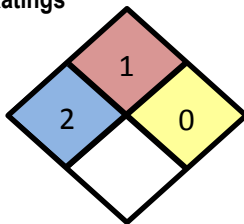
Country or Region	Inventory	On Inventory? (Yes/No)
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
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

16. Other Information

Date Prepared or Revised: January 2015
 Supersedes: September 2013
 Contact Simpson Strong-Tie Environmental Health and Safety at EHS@strongtie.com.

Additional Classifications

NFPA Ratings



HMIS Rating

HEALTH	2	PHYSICAL	0
FLAMMABILITY	1	PPE	B

Disclaimer

This Safety Data Sheet (SDS) is prepared by Simpson Strong-Tie Co. in compliance with the requirements of OSHA 29 CFR Part 1910.1200. The information it contains is offered in good faith as accurate as of the date of this SDS. This SDS is provided solely for the purpose of conveying health, safety, and environmental information. No warranty, expressed or implied, is given. Health and Safety precautions may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

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FOR INTERNAL USE ONLY

A Component 752:	B Component 752:
XCOM3B	XCOM3B
	XCORR

1. Identification

Product Identification

Product Identifier: B Component FX-752 (FX752-1QTB, FX752-1B, FX752-5B)
Recommended Use: Two-Component, Epoxy Bonding Agent – Component B
Use Restrictions: For industrial use only.

Company Identification

Company: Simpson Strong-Tie Company Inc.
Address: 5956 W. Las Positas Blvd.
 Pleasanton, CA 94588 USA
Phone: 1-800-999-5099
Website: www.strongtie.com
Emergency: 1-800-535-5053 (US/Canada) / 1-352-323-3500 (International)
 For most current SDS, please visit our website at www.strongtie.com/sds

2. Hazard Identification

General Information

FX-752 is a two part system. The two parts of this product have been assessed according to GHS. This Safety Data Sheet covers hazards and responses for Component B. See Component A Safety Data Sheet for complete product information.

Component B GHS Classification



Physical Hazards:	Not Classified.	
Health Hazards	Acute Toxicity, Oral	Category 4
	Acute Toxicity, Dermal	Category 4
	Acute Toxicity, Inhalation	Category 4
	Skin Corrosion/Irritation	Category 1
	Serious Eye Damage/Irritation	Category 1
	Sensitization, Skin	Category 1
	Germ Cell Mutagenicity	Category 2
	Reproductive Toxicity	Category 2
	STOT, Single Exposure	Category 3 (Respiratory Irritation)
	STOT, Repeated Exposure	Category 2 (Central Nervous System, Liver, Kidney)
Environmental Hazards:	Acute Environmental Hazard	Category 1
	Chronic Environmental Hazard	Category 1
Signal Word:	DANGER!	
Hazard Statements:	Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. Suspected of causing genetic defects. Suspected of damaging fertility or the unborn child. May cause damage to organs (central nervous system, kidney, liver) through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.	
Precautionary Statements:		
Prevention:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Wear protective gloves/clothing/eye protection/face protection. Do not breathe mist or vapor. Use only outdoor or in a well-ventilated area. Do not eat, drink, or smoke when using this product. Wash thoroughly after handling. Contaminated clothing should not be allowed out of the workplace. Avoid release to the environment.	
Response:	In case of fire: Use appropriate media to extinguish. If exposed or concerned: Get medical attention/advice. If swallowed: Rinse mouth. Do NOT induce vomiting. If inhaled: Remove person to fresh air and keep comfortable for breathing. If on skin: Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.	

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Storage:
Disposal:

Continue rinsing. Call a poison center/doctor if you feel unwell. If skin irritation or rash occurs, or eye irritation persists: Get medical advice/attention. Collect spillage.
Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local/regional/national regulations.

Hazards Not Otherwise Classified (HNOC)

The above hazards are for the uncured B component of FX-752. Upon combination with the A component of FX-752 an innocuous solid coating is formed which does not present any immediate hazards. Upon grinding or cutting through the cured coating the following hazards may apply.



Health Hazard: Carcinogenicity Category 1A
STOT, Repeated Exposure Category 2 (Lung)
Hazard Statements: May cause cancer. May cause damage to organs (lung) through prolonged or repeated exposure (processing dust).
Precautionary Statements: Do not breathe dust.

3. Composition Information

General Information

This product is a mixture. Hazardous ingredients for each component are listed below. May include other nonhazardous ingredients. May include other trace ingredients, see Section 15.

Composition – All concentrations are in percent by weight unless otherwise indicated.

Chemical Name	CAS Number	Weight %
Crystalline Silica, Quartz	14808-60-7	40-60
Tofa, reaction products with TEPA	68953-36-6	20-40
Precipitated Calcium Carbonate	471-34-1	1-10
Benzene-1,3-Dimethanamine	1477-55-0	1-5
Tetraethylenepentamine	112-57-2	1-5
Diethylenetriamine	111-40-0	1-5
Bisphenol-A	80-05-7	1-5
Phenol	108-95-2	1-5
Benzyl Alcohol	100-51-6	1-5
Nonylphenol	25154-52-3	1-5
Polyoxypropylenediamine	9046-10-0	1-5
2,2',2"-nitrioloethanol	102-71-6	1-5
4-tert-butylphenol	98-54-4	1-5
2-Piperazin-1-ylethylamine	140-31-8	1-5
Titanium Dioxide	13463-67-7	< 1

4. First-Aid Measures

General Information

Provide general supportive measures and treat symptomatically. Symptoms may be delayed. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

Routes of Exposure

Eye Contact: Immediately flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open. Remove contact lenses if present and easy to do. If redness, burning, blurred vision, or swelling persists, **consult a physician.**

Skin Contact: Remove contaminated clothing and product, immediately wash affected area with soap and water. If rash or irritation persists **consult a physician.**

Ingestion: Rinse mouth immediately. Do NOT induce vomiting. **Consult a physician.**

Inhalation: Remove patient to fresh air. Give oxygen or artificial respiration if needed. If patient continues to experience difficulty breathing, **consult a physician.**

Most Important Symptoms

May cause severe irritation or burns to the eyes, skin, gastrointestinal tract, and respiratory system. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Dermatitis. Rash. Coughing, shortness of breath. Decreased motor functions.

5. Fire-Fighting Measures

Suitable Extinguishing Media: Water fog, carbon dioxide, dry chemical powder, aqueous foam.
Additional Information: None known.
Hazards during Fire-Fighting: Irritating and toxic fumes may be produced at high temperature. Hazardous gases/vapors produced are carbon monoxide, carbon dioxide, oxides of nitrogen, cyanide, aldehydes, and miscellaneous hydrocarbons. Do not allow run-off from fire-fighting to enter drains or water courses.
Fire-Fighting Procedures: Use standard fire-fighting procedures and consider the hazards of other involved materials. In case of fire and/or explosion do not breathe fumes. Self-contained breathing apparatus and full protective clothing must be worn. Move containers from fire area if you can do so without risk. Cool containers with flooding quantities of water until well after fire is out. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. Accidental Release Measures

Personal Precautions

Keep unnecessary personnel away. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Local authorities should be advised if significant spillages cannot be contained.

Clean-Up Methods

Small spills: Wipe up with absorbent material (e.g. cloth, fleece). Place in leak-proof containers. Seal tightly for proper disposal. Clean surface thoroughly to remove residual contamination.
Large spills: Stop the flow of material, if this is without risk. Dike far ahead of spill to contain material. Use a non-combustible material like vermiculite, sand or earth to soak up the product. Place in leak-proof containers. Seal tightly for proper disposal. Following product recovery, flush area with water.

Environmental Precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so.

7. Handling and Storage

Handling

Wear appropriate personal protective equipment. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Avoid breathing fumes or vapors. When in use do not eat, drink, or smoke. Wash thoroughly after handling. Wash contaminated clothing before reuse. Avoid contact during pregnancy/while nursing. Avoid prolonged exposure. Observe good industrial hygiene practices.

Storage

Store locked up. Store in a closed container away from incompatible materials. Keep in original container, keep container tightly closed. Store in a cool, dry place out of direct sunlight. Keep away from heat and sources of ignition. Protect from physical damage.

8. Exposure Controls / Personal Protection

Personal Protective Equipment

Protective Measure: Wear appropriate personal protective equipment.
Eye Protection: Wear chemical splash goggles or safety glasses with side shield.
Hand Protection: Wear chemical-resistant gloves such as: Nitrile, neoprene, butyl.
Skin and Body Protection: Wear long sleeve shirts/long pants and other clothing as required to minimize contact.
Respirator Protection: The use of a respirator is not required during normal use of this product in properly ventilated areas. An approved respirator should be worn whenever workplace conditions warrant respirator use, or when grinding or cutting cured product.
General Hygiene: 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.

Engineering Controls

When using indoors good general ventilation should be used. Ventilation rates should be matched to conditions. Provide eyewash station.

Exposure Limits

Component	OSHA (PEL)	ACGIH (TLV)	NIOSH Pocket Guide
Calcium Carbonate (CAS 427-34-1)	5 mg/m ³ (Respirable) 15 mg/m ³ (Total dust)	N/E	5 mg/m ³ (Respirable) 10 mg/m ³ (Total dust)
Benzene-1,3-Dimethylamine* (CAS 108-95-2)	N/E	0.1 mg/m ³ (ceiling)	0.1 mg/m ³ (ceiling)
Benzyl Alcohol (CAS 100-51-6)	N/E	10 ppm	44.2 mg/m ³ 10 ppm
Diethylenetriamine* (CAS 111-40-0)	N/E	1 ppm	1 ppm
Phenol* (CAS 108-95-2)	5 ppm	5 ppm	5 ppm (TWA) 15.6 ppm (ceiling)
Tetraethylenepentamine* (CAS 112-57-2)	1 ppm	1ppm	1 ppm (aerosol)
Tofa, reaction products with TEPA (CAS 68953-36-6)	5 ppm	5 ppm	N/E
Quartz (CAS 14808-60-7)	$\frac{10}{\%SiO_2 + 2} \text{ mg} / \text{m}^3$ (respirable)	0.025 mg/m ³ (respirable)	0.05 mg/m ³ (respirable)
Titanium Dioxide (CAS 13463-67-7)	15 mg/m ³ (Total dust)	10 mg/m ³	N/E

*Skin Designation: Material can be absorbed through the skin.

9. Physical and Chemical Properties

Physical State:	Liquid	Freezing/Melting Point:	N/E
Form:	Liquid	Boiling Point:	N/E
Color:	Dark Gray	Flash Point:	266°F (130°C)
Odor:	Ammonia	Evaporation Rate:	N/E
Odor Threshold:	N/E	Specific Gravity:	1.3
pH:	N/E	Viscosity:	N/E
Flammability:	N/E	U/L Flammability:	N/E
Vapor Pressure:	N/E	Vapor Density:	N/E
Solubility:	Slight	Kow:	N/E
Decomposition:	N/E	VOC (A+B):	4 g/L

10. Stability and Reactivity

Reactivity:	This product is stable and non-reactive under normal conditions.
Chemical Stability:	Stable under normal storage conditions.
Condition to Avoid:	High heat and open flame.
Substances to Avoid:	Oxidizing agents and acids.
Hazardous Reactions:	Hazardous polymerization will not occur.
Decomposition Products:	Carbon dioxide, carbon monoxide, oxides of nitrogen and other organic compounds.

11. Toxicological Information

Likely Routes of Exposure

Ingestion:	Harmful if swallowed. Causes digestive tract burns.
Inhalation:	Harmful if inhaled. Irritating to the respiratory system.
Skin contact:	Harmful in contact with skin. Causes skin burns. May cause an allergic skin reaction.
Eye contact:	Causes serious eye damage.

Information on Toxicological Effects

Acute toxicity: Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled.

Component	Species	Test Result
2-Piperazin-1-ylethylamine (CAS 140-31-8) Acute, Dermal, LC50	Rabbit	880 mg/kg
Benzyl Alcohol (100-51-6) Acute, Dermal, LD50 Acute, Inhalation, LC50 Acute, Oral, LD50	Rabbit	2000 mg/kg
	Rat	200-300 mg/L, 8Hours
	Rat	1230-3100 mg/kg
Benzene-1,3-Dimethylamine (CAS 1477-55-0) Acute, Oral, LD50 Acute, Dermal, LC50 Acute, Inhalation, LC50	Rat	2000 mg/kg
	Rabbit	930 mg/kg
	Rat	700 ppm, 1 Hour
Bisphenol-A (CAS 80-05-7) Acute, Oral, LD50	Rat	3300 mg/kg
Diethylenetriamine (CAS 111-40-0) Acute, Oral, LD50 Acute, Dermal, LC50	Rat	2800 mg/kg
	Rabbit	550 mg/kg
Phenol (CAS 108-95-2) Acute, Oral, LD50 Acute, Dermal, LC50	Rat	317 mg/kg
	Rabbit	850 mg/kg
Tofa, reaction products with TEPA (CAS 68953-36-6) Acute, Oral, LD50	Rat	>2000 mg/kg
Tetraethylenepentamine (CAS 112-57-2) Acute, Oral, LD50 Acute, Dermal, LC50	Rat	2.1 mg/kg
	Rabbit	0.66 mg/kg

Skin corrosion/irritation: Causes severe skin burns and eye damage.
Eye damage/eye irritation: Causes serious eye damage.
Respiratory sensitization: No data available.
Skin sensitization: May cause skin sensitization by contact.
Germ cell mutagenicity: Components of this product are suspected of causing genetic defects.
Carcinogenicity: May cause cancer. The B components of this product contain components that are listed carcinogens. These components are considered carcinogens only in their inhalable form. Due to the nature of this product inhalation is highly unlikely. Exposure to respirable carcinogens is likely only when grinding or cutting cured product, ensure good work practice and use of personal protective equipment as needed to control exposure to processing dust.
IARC Monographs. Overall Evaluation of Carcinogenicity
 Quartz (14808-60-7) 1 Carcinogenic to humans.
 Titanium Dioxide (13463-67-7) 2B Possibly Carcinogenic to humans.
 Phenol (CAS 108-95-2) 3 Not classifiable as to carcinogenicity in humans.
NTP Report on Carcinogens
 Quartz (14808-60-7) Known to be Human Carcinogen.
Reproductive toxicity: Components of this product are suspected of damaging fertility or the unborn child.
Aspiration hazard: No data available.
Specific target organ toxicity:
Single exposure: May cause respiratory irritation.
Repeated exposure: May cause damage to organs (central nervous system, liver, kidney) through prolonged or repeated exposure. May cause damage to organs (lung) through prolonged or repeated exposure (inhalation of processing dust).

Further Information

Toxicological, ecotoxicological, physical, and chemical properties may not have been fully investigated. Hazard data above is estimated based on best available information. Some workers with certain pre-existing medical conditions such as: asthma, allergies, or impaired pulmonary and/or liver functions, or who may be particularly susceptible to this material, may be affected by exposure to this material.

12. Ecological Information

General Information

Information given is based on data on the components and the ecotoxicology of similar products. The product is classified as very toxic to aquatic life with long lasting effects. Avoid release to the environment.

Supporting Data

Component	Species	Test Result
2-Piperazin-1-ylethylamine (CAS 140-31-8) Aquatic, Fish, LC50	Fathead Minnow	1950-2460 mg/l, 96 hours
Benzyl Alcohol (CAS 100-51-6) Aquatic, Fish, LC50	Bluegill	10 mg/l, 96 hours
Bisphenol-A (CAS 80-05-7) Aquatic, Fish, LC50 Aquatic, Crustacea, EC50	Fathead Minnow Daphnia magna	3.6-5.4 mg/l, 96 hours 9.2-11.4 mg/l, 48 hours
Nonylphenol (CAS 84852-15-3) Aquatic, Fish, LC50 Aquatic, Crustacea, EC50	Winter Flounder Clam	0.017 mg/l, 96 hours 0.0379 mg/l, 48 hours
Phenol (CAS 108-95-2) Aquatic, Fish, LC50 Aquatic, Crustacea, EC50	Asiatic Knifefish Daphnia obtusa	8-8.25 mg/l, 96 hours 2.7 mg/l, 48 hours
Polyoxypropylenediamine (CAS 9046-10-0) NOEC	Algae	0.32 mg/l, 72 Hours

Persistence and degradability:

No data available.

Bioaccumulative potential:

No data available for the product.

Partition Coefficient n-octanol/water (log Kow) Components

Bisphenol-A (CAS 80-05-7)	3.32
Phenol (CAS 108-95-2)	1.46
Tetraethylenepentamine (CAS 112-57-2)	1.503

Mobility in soil:

No data available.

Other Adverse Effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

13. Disposal Considerations

Waste Disposal of Substance:

Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national regulations.

Container Disposal:

Empty containers or liners may retain some product residues; follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transportation Information

UN number:	UN2735
UN proper shipping name:	AMINES, LIQUID, CORROSIVE, N.O.S. (Diethylenetriamine), 8, II, Marine Pollutant
Transportation Class:	8 (9)
Precautions:	Corrosive, Other Hazard
Packing Group:	II
Environment Hazard?:	Yes
Required Labels:	8
ERG Code (IATA):	8L
EmS (IMDG):	F-A, S-B

Additional Information

Special precautions for user:

Read safety instructions, SDS and emergency procedures before handling.

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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

This information does not cover all specific regulatory or operational requirements of this product. The classifications for transportation may vary by container volume or different regional or national regulations.

15. Regulatory Information

United States

Federal Regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4):

Bisphenol-A (CAS 80-05-7) LISTED
Phenol (CAS 108-95-2) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories:				
Immediate	Delayed	Fire	Pressure	Reactivity
Yes	Yes	No	No	No

SARA 302 Extremely hazardous substance:

Component	CAS	Reportable Quant.	Threshold Planning Quant. Lower Value	Threshold Planning Quant. Upper Value
Phenol	108-95-2	1000	500 lbs	10000 lbs

SARA 311/312 Hazardous chemical: Yes

SARA 313 (TRI reporting):

Component	CAS	% In Blend (approx.)
Bisphenol A	80-05-7	1-10
Phenol	108-95-2	1-10

US. California Proposition 65: WARNING: This product contains a chemical listed by the State of California as known to cause cancer, birth defects, or reproductive harm.

Component	Regulation	% In Blend (approx.)	Remark
Quartz (14808-60-7)	ACGIH	40-60	Carcinogenic
Titanium Dioxide (13463-67-7)	ACGIH	< 1	Carcinogenic

US State Right-To-Know Lists

Chemical	Massachusetts RTK	New Jersey Work and Community RTK Act	Pennsylvania Worker and Community RTK Law	Rhode Island RTK
2-Piperazin-1-ylethylamine (140-31-8)	Listed	Listed	Listed	
Benzyl Alcohol (100-51-6)	Listed		Listed	
Benzene-1,3-Dimethylamine (1477-55-0)	Listed	Listed	Listed	
Bisphenol A (80-05-7)	Listed	Listed	Listed	Listed
Diethylenetriamine (111-40-0)	Listed	Listed	Listed	
Phenol (108-95-2)	Listed	Listed	Listed	Listed
Tetraethylenepentamine (112-57-2)	Listed	Listed	Listed	

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Canada

This product has been classified according to the hazard criteria of the CPR and the SDS contains all of the information required by the CPR.

WHMIS Classification

	
Class E: Corrosive Material	Class D-2A: Material Causing other toxic effects

International

The product is classified and labeled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work.

This product is not subject to or not applicable for any of the following International Regulations; **Stockholm Convention, Rotterdam Convention, Kyoto Protocol, Montreal Protocol, Basel Convention.**

International Inventories

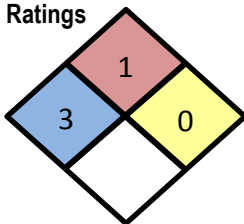
Country	Inventory	On Inventory?
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
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	Toxic Substances Control Act (TSCA) Inventory	Yes

16. Other Information

Date Prepared or Revised: January 2015
Supersedes: September 2013
Contact Simpson Strong-Tie Environmental Health and Safety at EHS@strongtie.com.

Additional Classifications

NFPA Ratings



HMIS Rating

HEALTH	3	PHYSICAL	0
FLAMMABILITY	1	PPE	B

Disclaimer

This Safety Data Sheet (SDS) is prepared by Simpson Strong-Tie Co. in compliance with the requirements of OSHA 29 CFR Part 1910.1200. The information it contains is offered in good faith as accurate as of the date of this SDS. This SDS is provided solely for the purpose of conveying health, safety, and environmental information. No warranty, expressed or implied, is given. Health and Safety precautions may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

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A Component 752: XCOM3B	B Component 752: XCOM3B XCORR
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