

FX-70-9™ Epoxy Coating

SAFETY DATA SHEET

1. Identification

Product Identification

Product Identifier: A Component FX-70-9™ (WH00, WH01)
Recommended Use: FX-70-9 Epoxy Coating is a protective coating for use with steel, concrete and wood.
Use Restrictions: For industrial use only. To ensure proper installation, use according to package directions. Complete application instructions can be found in Simpson Strong-Tie catalogs or online at strongtie.com.

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-70-9 Epoxy Coating is a 100% solids, two part system (2A:1B mix) designed to protect steel, wood, and concrete surfaces in commercial and industrial settings. The two parts of this product have been assessed individually according to the Globally Harmonized System (GHS). The mixed product can be assumed to carry the hazards of each component until the product has been fully cured. 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

Classification according to HazCom 2012 (GHS)

Physical Hazards:	Not Classified.		
Health Hazards	Skin Corrosion/Irritation	Category 2	H315: Causes skin irritation
	Serious Eye Damage/Irritation	Category 2	H319: Causes serious eye irritation
	Sensitization, Skin	Category 1	H317: May cause an allergic skin reaction
Environmental Hazards:	Chronic Environmental Hazard	Category 2	H411: Toxic to aquatic life with long lasting effects

Main Symptoms: Irritation of eyes and skin. Symptoms include redness, itching, burning, tearing, swelling, and blurred vision. May cause rash/allergic reaction to the skin.

GHS Label Elements



Contains: Bisphenol-A Based Epoxy Resin, Titanium Dioxide, Castor Oil Glycidyl Ether

Signal Word: **WARNING!**

Hazard Statements:

H315:	Causes skin irritation.
H319:	Causes serious eye irritation.
H317:	May cause an allergic skin reaction.
H411:	Toxic to aquatic life with long lasting effects.

Precautionary Statements:

Prevention:	P201:	Obtain special instructions before use.
	P202:	Do not handle until all safety precautions have been read and understood.
	P261:	Avoid breathing dust, mist, or vapor.
	P264:	Wash thoroughly after handling.
	P272:	Contaminated clothing should not be allowed out of the workplace.
	P273:	Avoid release to the environment.

Response:	P280:	Wear protective gloves/clothing/eye protection/face protection.
	P302+P352:	IF ON SKIN: Wash with plenty of water.
	P333+P313:	If skin irritation or rash occurs: Get medical advice/attention.
	P362+P364:	Take off contaminated clothing and wash before reuse.
	P305+P351+P338:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage:	P337+P313:	If eye irritation persists: Get medical advice/attention.
	P308+P313:	If exposed or concerned: Get medical advice/attention.
	P391:	Collect spillage.
	P403:	Store in a well-ventilated place.
	P405:	Store locked up.
Disposal:	P501:	Dispose of contents/container in accordance with local/regional regulations.

Supplemental Label Information: None known.

Hazards Not Otherwise Classified (HNOC)

The above hazards are for the uncured A component of FX-70-9. Upon combination with the B component, an innocuous solid which does not present any immediate hazards is formed. Upon grinding or cutting through the cured product, the following hazards may apply. Ensure that good work practices, and the necessary precautionary measures, are taken to maintain safe use of the product.



Chronic Health

Health Hazard:	Carcinogenicity	Category 2
OSHA Hazard:	Combustible Dust	
Hazard Statements:	Suspected of causing cancer. Can form explosive air-dust mixtures, avoid creating dust.	
Precautionary Statements:	Do not breathe dust. Do not allow dust to build up on surfaces.	

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.

List of abbreviations and symbols:

Classification: Global Harmonized System Classifications

The full text for H-phrases is displayed in section 16. All concentrations are in percent by weight unless otherwise noted.

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

Chemical Name	Weight %	CAS Number	EC Number
Bisphenol-A Based Epoxy Resin	60-80	25068-38-6	500-033-5
Classification: Skin Irrit. 2: H315, Eye Irrit. 2: H319, Skin Sens. 1: H317, Aquatic Chronic 2: H411			
Titanium Dioxide	10-30	13463-67-7	236-675-5
Classification: Carc. 2: H351			
Castor Oil Glycidyl Ether	1-10	74398-71-3	616-085-8
Classification: Skin Irrit. 2: H315, Skin Sens. 1: H317			

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; wash affected area with soap and water. Do not apply greases or ointments. If redness, burning, or swelling persists, consult a physician.
Ingestion:	Rinse mouth. If you feel unwell, consult a physician.

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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

Irritation of eyes and skin. Symptoms include rash, redness, itching, burning, tearing, swelling, and blurred vision.

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).

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

Non-emergency personnel: Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). 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. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Emergency personnel: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate personal protection.

Clean-Up Methods

Small spills (uncured):

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 (uncured):

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.

Cured Material:

Chip or grind off surface. If you are grinding or cutting cured product, ensure good work practice and use of personal protective equipment as needed to control exposure to respirable dust.

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. Do not taste or swallow. Avoid prolonged exposure. 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. Observe good industrial hygiene practices. Do not empty into drains, avoid release to the environment.

Storage

Store in a closed container away from incompatible materials (Section 10 of the SDS). 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. An approved respirator should be worn whenever workplace conditions warrant respirator use, or when grinding or cutting cured product.

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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

Component	OSHA (PEL)	ACGIH (TLV)	NIOSH Pocket Guide
Titanium Dioxide (CAS 13463-67-7)	15 mg/m ³ (total dust)	10 mg/m ³	N/E

9. Physical and Chemical Properties

Physical State:	Liquid	Freezing/Melting Point:	N/E
Form:	Liquid	Boiling Point:	N/E
Color:	Various	Flash Point:	>200°F (>93°C)
Odor:	Slight	Evaporation Rate:	N/E
Odor Threshold:	N/E	Specific Gravity:	1.26
pH:	N/E	VOC (A+B):	12 g/L
Flammability:	N/E	U/L Flammability:	N/E
Vapor Pressure:	N/E	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:	Expected to be a low ingestion hazard.
Inhalation:	Prolonged exposure may cause respiratory irritation.
Skin contact:	Causes skin irritation. May cause an allergic skin reaction.
Eye contact:	Causes serious eye irritation.
Symptoms:	Rash, redness, itching, burning, tearing, swelling, and blurred vision.

Information on Toxicological Effects

Acute Effects

Toxicity:	Not expected to be acutely toxic.
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Component	Estimate
FX-70-9 Component A Toxicity Estimate	
Acute, Oral, LD50	> 9000

Component	Species	Test Result
Bisphenol-A Based Epoxy Resin (CAS 25068-38-6)		
Acute, Oral, LD50	Rat	11400 mg/kg
Acute, Dermal, LD50	Rabbit	2000 mg/kg
Titanium Dioxide (CAS 13463-67-7)		
Acute, Oral, LD50	Rat	> 10000 mg/kg
Acute, Inhalation, LC50	Rat	> 6.82 mg/l, 4 hours

Skin corrosion/irritation:	Causes skin irritation.
Eye damage/eye irritation:	Causes serious eye irritation.

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Respiratory sensitization: No data available.
Skin sensitization: May cause skin sensitization by contact.
Aspiration hazard: No data available.
**Specific target organ toxicity
Single Exposure:** No data available.

Chronic Effects

Germ cell mutagenicity: No data available
Carcinogenicity: FX-70-9 contains chemicals which are considered carcinogens in respirable form. Ensure good work practice and use personal protective equipment as needed to control exposure to processing dust.
Reproductive toxicity: No data available.
**Specific target organ toxicity
Repeated Exposure:** No data available.

Carcinogen / Reproductive Toxin / Mutagen Information					
Component	% In Blend (approx.)	IARC Monographs	NTP	ACGIH	Other
Titanium Dioxide (CAS 13463-67-7)	10-30	2B	---	---	CA65
IARC: 1- Carcinogenic 2- Possibly carcinogenic 3 - Not classifiable as to carcinogenicity 4 - Probably not carcinogenic NTP: Known to be human carcinogen or Reasonably anticipated to be a human carcinogen ACGIH - A1 - Confirmed carcinogen A2 - Suspected carcinogen A3 - Animal carcinogen A4 - Not classified A5 - Not suspected CA65 - California Prop 65					

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 Based Epoxy Resin (CAS 25068-38-6)		
Aquatic , Fish, LC50	Salmo gairdneri	1.5 mg/l, 96 hours
Aquatic , Crustacea, EC50	Daphnia magna	2.7 mg/l, 48 hours
Castor Oil Glycidyl Ether (CAS 74398-71-3)		
Aquatic , Fish, LC50	Fish	> 100 mg/l, 96 hours

Persistence and degradability: No data available.
Bioaccumulative potential: No data available for the product.

Chemical	Log Kow	BCF	Bioaccumulation Potential
Bisphenol-A Based Epoxy Resin (CAS 25068-38-6)	2.64-3.78	3-31	low

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

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Container Disposal:

with local/regional/national regulations.

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.

Disposal of Cured Product:

Chip or grind off surface. Solid material does not need special disposal consideration.

14. Transportation Information

FX-70-9 Component A is not regulated for ground transportation by the US DOT; 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
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):

Toluene (CAS 108-88-3) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA):

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

SARA 302 Extremely hazardous substance: No

SARA 311/312 Hazardous chemical: Yes

SARA 313 (TRI reporting):

Component	CAS Number	% In Blend (approx.)
Toluene	108-88-3	Trace

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.

Carcinogen / Reproductive Toxin / Mutagen Information					
Component	% In Blend (approx.)	IARC Monographs	NTP	ACGIH	Other
Titanium Dioxide (CAS 13463-67-7)	10-30	2B	---	---	CA65 (Carcinogenic)
Toluene (CAS 108-88-3)	Trace	3	---	---	CA65 (Developmental)
IARC: 1- Carcinogenic 2- Possibly carcinogenic 3 - Not classifiable as to carcinogenicity 4 - Probably not carcinogenic NTP: Known to be human carcinogen or Reasonably anticipated to be a human carcinogen ACGIH - A1 - Confirmed carcinogen A2 - Suspected carcinogen A3 - Animal carcinogen A4 - Not classified A5 - Not suspected CA65 - California Prop 65					

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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
Titanium dioxide (CAS 13463-67-7)	Listed	Listed	Listed	

Canada

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

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.

REACH Registered Substances			
Chemical	CAS Number	EC Number	Index Number
Bisphenol-A Based Epoxy Resin	25068-38-6	500-033-5	603-074-00-8

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

Australia	One or more components of this product are not listed on the Australian Inventory of Chemical Substances (AICS).
Canada	All components of this product are included on the Domestic Substances List (DSL).
China	All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).
Europe	All components of this product are included on the European Inventory of Existing Commercial Chemical Substances (EINECS) or are exempt from listing.
Japan	One or more components of this product are not listed on the Inventory of Existing and New Chemical Substances (ENCS).
Korea	One or more components of this product are not listed on the Existing Chemicals List (ECL).
New Zealand	One or more components of this product are not included on the New Zealand Inventory.
Philippines	One or more components in this product are not listed in the Philippine Inventory of Chemicals and Chemical Substances (PICCS).
United States	All components of this product are listed on the Toxic Substances Control Act (TSCA) Inventory or not required to be listed.

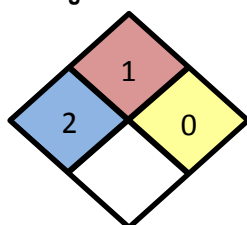
16. Other Information

Date Prepared or Revised: August 2016
Supersedes: January 2015

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

Abbreviations

ACGIH:	American Conference of Governmental Industrial Hygienists
CAS No.:	Chemical Abstract Service Registry Number
CERCLA:	Comprehensive Environmental Response, Compensation and Liability Act (U.S. EPA)
HPR:	Hazardous Product Regulations (Canada)
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association
IMDG:	International Maritime Dangerous Goods code
NIOSH:	National Institute of Occupational Safety and Health (U.S.)
NFPA:	National Fire Protection Association (US)
NTP:	National Toxicology Program (US)
PEL:	Permissible Exposure Limit
SARA:	Superfund Amendments and Reauthorization Act (U.S. EPA)
STEL:	Short Term Exposure Limit (15 minute Time Weighted Average)
STOT:	Specific Target Organ Toxicity (GHS Classification)
TLV:	Threshold Limit Value
TSCA:	Toxic Substances Control Act (U.S.)
TWA:	Time Weighted Average (exposure for 8-hour workday)
VOC:	Volatile Organic Compounds
WHMIS:	Canadian Workplace Hazardous Materials Information System

Full Text of H – Phrases Under Section 3

H315:	Causes skin irritation.
H317:	May cause an allergic skin reaction.
H319:	Causes serious eye irritation.
H351:	Suspected of causing cancer.
H411:	Toxic to aquatic life with long lasting effects.

Disclaimer

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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Internal

FOR INTERNAL USE ONLY

A Component 70-9 :	B Component 70-9:
XCOM3B	XCOM3A
	XCORR

FX-70-9™ Epoxy Coating

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1. Identification

Product Identification

Product Identifier: B Component FX-70-9™ (WH00, WH01)
Recommended Use: FX-70-9 Epoxy Coating is a protective coating for use with steel, concrete and wood.
Use Restrictions: For industrial use only. To ensure proper installation, use according to package directions. Complete application instructions can be found in Simpson Strong-Tie catalogs or online at strongtie.com.

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-70-9 Epoxy Coating is a 100% solids, two part system (2A:1B mix) designed to protect steel, wood, and concrete surfaces in commercial and industrial settings. The two parts of this product have been assessed individually according to the Globally Harmonized System (GHS). The mixed product can be assumed to carry the hazards of each component until the product has been fully cured. 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

Classification according to HazCom2012 (GHS)

Physical Hazards:	Flammable Liquids	Category 4	H227: Combustible liquid
Health Hazards	Acute Toxicity, Oral	Category 4	H302: Harmful if swallowed
	Acute Toxicity, Inhalation	Category 4	H332: Harmful if inhaled
	Skin Corrosion/Irritation	Category 1	H314: Causes severe skin burns and eye damage
	Serious Eye Damage/Irritation	Category 1	H318: Causes severe eye damage
	Sensitization, Skin	Category 1	H317: May cause an allergic skin reaction
Environmental Hazards:	Chronic Aquatic Hazard	Category 3	H412: Harmful to aquatic life with long lasting effects

Main Symptoms: Damage to the eyes and skin. Symptoms include burns, redness, itching, tearing, swelling, and blurred vision. May cause rash/allergic reaction to the skin. May cause severe irritation or burns to the gastrointestinal tract and respiratory system. May cause shortness of breath, discomfort in chest, or coughing.

GHS Label Elements



Contains: Isophorone Diamine, Benzyl Alcohol, Bisphenol-A Based Epoxy Resin, Salicylic Acid
Signal Word: DANGER!
Hazard Statements:
H227: Combustible liquid.
H302: Harmful if swallowed.
H332: Harmful if inhaled.
H314: Causes severe skin burns and eye damage.
H318: Causes severe eye damage.
H317: May cause an allergic skin reaction.

Precautionary Statements:

Prevention:

H412: Harmful to aquatic life with long lasting effects.

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

Response:

P260: Do not breathe dust, mist, or vapor.
P264: Wash thoroughly after handling.
P270: Do not eat, drink, or smoke when using this product.
P271: Use only outdoor or in a well-ventilated area.
P272: Contaminated clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/clothing/eye protection/face protection.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P312: Call a POISON CENTER/doctor if you feel unwell.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P333: If skin irritation or rash occurs: Get medical advice/attention.
P363: Wash contaminated clothing before reuse.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+P314: If experiencing respiratory symptoms: Get medical advice/attention if you feel unwell.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P308+P313: If exposed or concerned: Get medical attention/advice.
P370+P378: In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.

Storage:

P391: Collect spillage.
P403+P233+P235: Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Disposal:

P405: Store locked up.
P501: Dispose of contents/container in accordance with local/regional regulations.

Supplemental Label Information: None known.

Hazards Not Otherwise Classified (HNOC)

The above hazards are for the uncured B component of FX-70-9. Upon combination with the A component, an innocuous solid which does not present any immediate hazards is formed. Upon grinding or cutting through the cured product, the following hazards may apply. Ensure that good work practices, and the necessary precautionary measures, are taken to maintain safe use of the product.



Chronic Health

Health Hazard:

Carcinogenicity Category 2

OSHA Hazard:

Combustible Dust

Hazard Statements:

Suspected of causing cancer.
Can form explosive air-dust mixtures, avoid creating dust.

Precautionary Statements:

Do not breathe dust.
Do not allow dust to build up on surfaces.

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.

List of abbreviations and symbols:

Classification: Global Harmonized System Classifications

The full text for H-phrases is displayed in section 16. All concentrations are in percent by weight unless otherwise noted.

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

Chemical Name	Weight %	CAS Number	EC Number
Isophorone Diamine	30-50	2855-13-2	220-666-8
Classifications: Acute Tox. 4: H302, Skin Corr. 1B: H314, Skin Sens. 1: H317, Aquatic Chronic 3: H412			
Benzyl Alcohol	20-40	100-51-6	202-859-9
Classifications: Acute Tox. 4: H302+H332			
Bisphenol-A Based Epoxy Resin	1-10	25068-38-6	500-033-5
Classifications: Skin Irrit. 2: H315, Eye Irrit. 2: H319, Skin Sens. 1: H317, Aquatic Chronic 2: H411			
Salicylic Acid	1-10	69-72-7	200-712-3
Classifications: Acute Tox 4: H302, Eye Corr. 1: H318			

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; wash affected area with soap and water. If redness, burning, or swelling persists, **consult a physician**.

Ingestion: Rinse mouth. If you feel unwell, **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

Damage to the eyes and skin. Symptoms include burns, redness, itching, tearing, swelling, and blurred vision. Rash/dermatitis. May cause severe irritation or burns to the gastrointestinal tract and respiratory system. May cause shortness of breath, discomfort in chest, or coughing.

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.

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

Non-emergency personnel: Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). 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. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Emergency personnel: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate personal protection.

Clean-Up Methods

Small spills (uncured): 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 (uncured): 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.

Cured Material:

Chip or grind off surface. If you are grinding or cutting cured product, ensure good work practice and use of personal protective equipment as needed to control exposure to respirable dust.

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 (Section 10 of the SDS). 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: 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.
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

Component	OSHA (PEL)	ACGIH (TLV)	NIOSH Pocket Guide
Benzyl Alcohol (CAS 100-51-6)	5 mg/m ³ (TWA)	N/E	5 mg/m ³ (STEL)

9. Physical and Chemical Properties

Physical State:	Liquid	Freezing/Melting Point:	N/E
Form:	Liquid	Boiling Point:	N/E
Color:	---	Flash Point:	---
Odor:	---	Evaporation Rate:	N/E
Odor Threshold:	N/E	Specific Gravity:	---
pH:	N/E	Viscosity:	N/E
Flammability:	N/E	U/L Flammability:	N/E
Vapor Pressure:	N/E	Vapor Density:	N/E
Solubility:	---	Kow:	N/E
Decomposition:	N/E	VOC(A+B):	---

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.
Skin contact:	Causes skin burns. May cause an allergic skin reaction.
Eye contact:	Causes severe eye damage.
Symptoms:	Burns, redness, itching, tearing, swelling, and blurred vision; shortness of breath, discomfort in chest, or coughing. Rash/dermatitis. May cause severe irritation or burns to the gastrointestinal tract and respiratory system.

Information on Toxicological Effects

Acute Effects

Toxicity: Harmful if swallowed. Harmful if inhaled.

Component	Estimate
FX-70-9 Component B Toxicity Estimate	
Acute, Oral, LD50	1234
Acute, Dermal, LD50	> 2000
Acute, Inhalation, LC50	3.68

Component	Species	Test Result
Benzyl Alcohol (CAS 100-51-6)		
Acute, Oral, LD50	Rat	1230 mg/kg
Acute, Dermal, LD50	Rabbit	2000 mg/kg
Acute, Inhalation, LC50	Rat	> 4.18 mg/l, 4 hours
Salicylic Acid (CAS 69-72-7)		
Acute, Oral, LD50	Rat	891 mg/kg
Acute, Dermal, LD50	Rat	> 2000 mg/kg
Acute, Inhalation, LC50	Rat	0.9 mg/l, 1 hour
Isophorone Diamine (CAS 2855-13-2)		
Acute, Oral, LD50	Rat	1030 mg/kg
Bisphenol-A-Epichlorohydrin Epoxy Resin (CAS 25068-38-6)		
Acute, Oral, LD50	Rat	11400 mg/kg
Acute, Dermal, LD50	Rat	2000 mg/kg

Skin corrosion/irritation:	Causes severe skin burns.
Eye damage/eye irritation:	Causes severe eye damage.
Respiratory sensitization:	No data available.
Skin sensitization:	May cause skin sensitization by contact.
Aspiration hazard:	No data available.
Specific target organ toxicity	
Single exposure:	No data available.

Chronic Health

Germ cell mutagenicity:	The available data does not indicate that any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity:	This products is not considered a carcinogen by IARC, ACGIH, NTP, or OSHA
Reproductive toxicity:	No data available.
Specific target organ toxicity	
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 very 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)	Aquatic , Fish, LC50	Salmo gairdneri 1.5 mg/l, 96 hours
	Aquatic , Crustacea, EC50	Daphnia magna 2.7 mg/l, 48 hours
Benzyl Alcohol (CAS 100-51-6)	Aquatic , Fish, LC50	Bluegill 10 mg/l, 96 hours
	Aquatic , Crustacea, EC50	Daphnia magna 23 mg/l, 48 hours
	Aquatic , Algae, EC50	Algae 35 mg/l, 3 hours
Salicylic Acid (CAS 69-72-7)	Aquatic , Fish, LC50	Fathead minnow 1380 mg/l, 96 hours
	Aquatic , Crustacea, EC50	Daphnia magna 870 mg/l, 48 hours
	Aquatic , Algae, EC50	Algae >100 mg/l, 72 hours
Isophorone diamine (CAS 2855-13-2)	Aquatic , Fish, LC50	Golden orfe 110 mg/l, 96 hours
	Aquatic , Crustacea, EC50	Daphnia magna 23 mg/l, 48 hours

Persistence and degradability: No data available.
Bioaccumulative potential: No data available for the product.

Chemical	Log Kow	BCF	Bioaccumulation Potential
BPA Epichlorohydrin Epoxy Resin (CAS 25068-38-6)	2.64-3.78	3-31	low
Benzyl Alcohol (CAS 100-51-6)	1.1	---	---
Salicylic Acid (CAS 69-72-7)	2	---	---

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.

Disposal of Cured Product: Chip or grind off surface. Solid material does not need special disposal consideration.

14. Transportation Information

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

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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: 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): Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA):

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

SARA 302 Extremely hazardous substance: No

SARA 311/312 Hazardous chemical: Yes

SARA 313 (TRI reporting): No

This product does not contain 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)**.

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
Isophorone Diamine (CAS 2855-13-2)		Listed		
Benzyl Alcohol (CAS 100-51-6)	Listed		Listed	

Canada

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

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.

REACH Registered Substances			
Chemical	CAS Number	EC Number	Index Number
Benzyl Alcohol	100-51-6	202-859-9	603-057-00-5
Isophorone Diamine	2855-13-2	220-666-8	612-067-00-9
Bisphenol-A-Epichlorohydrin Epoxy Resin	25068-38-6	500-033-5	603-074-00-8

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.**

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International Inventories

Australia	All components of this product are listed on the Australian Inventory of Chemical Substances (AICS).
Canada	All components of this product are included on the Domestic Substances List (DSL).
China	All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).
Europe	All components of this product are included on the European Inventory of Existing Commercial Chemical Substances (EINECS) or are exempt from listing.
Japan	One or more components of this product are not listed on the Inventory of Existing and New Chemical Substances (ENCS).
Korea	All components of this product are included on the Existing Chemicals List (ECL).
New Zealand	All components of this product are included on the New Zealand Inventory.
Philippines	All components in this product are listed in the Philippine Inventory of Chemicals and Chemical Substances (PICCS).
United States & Puerto Rico	All components of this product are listed on the Toxic Substances Control Act (TSCA) Inventory or are not required to be listed.

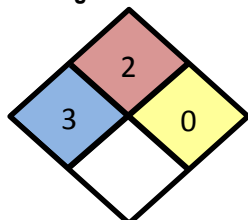
16. Other Information

Date Prepared or Revised: August 2016
Supersedes: January 2015

Contact Simpson Strong-Tie Environmental Health and Safety at EHS@strongtie.com.

Additional Classifications

NFPA Ratings



HMIS Rating

HEALTH	3	PHYSICAL	0
FLAMMABILITY	2	PPE	B

Abbreviations

ACGIH:	American Conference of Governmental Industrial Hygienists
CAS No.:	Chemical Abstract Service Registry Number
CERCLA:	Comprehensive Environmental Response, Compensation and Liability Act (U.S. EPA)
HPR:	Hazardous Product Regulations (Canada)
EPA:	Environmental Protection Agency (U.S.)
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals
HMIS:	Hazardous Materials Identification System
IARC:	International Agency for Research on Cancer
IATA:	International Air Transport Association
IMDG:	International Maritime Dangerous Goods code
NIOSH:	National Institute of Occupational Safety and Health (U.S.)
NFPA:	National Fire Protection Association (US)
NTP:	National Toxicology Program (US)
PEL:	Permissible Exposure Limit
SARA:	Superfund Amendments and Reauthorization Act (U.S. EPA)
STEL:	Short Term Exposure Limit (15 minute Time Weighted Average)
STOT:	Specific Target Organ Toxicity (GHS Classification)
TLV:	Threshold Limit Value
TSCA:	Toxic Substances Control Act (U.S.)
TWA:	Time Weighted Average (exposure for 8-hour workday)

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VOC: Volatile Organic Compounds
WHMIS: Canadian Workplace Hazardous Materials Information System

Full Text of H – Phrases Under Section 3

H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H315: May cause skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H411: Toxic to aquatic life with long lasting effects.
H412: Harmful to aquatic life long lasting effects.

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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Internal

FOR INTERNAL USE ONLY

A Component 70-9 :	B Component 70-9:
XCOM3B	XCOM3A
	XCORR