

Safety Data Sheet

Fix - Part B

SDS Revision Date:

07/21/2015 File No.: 0131

1. Identification

1.1. Product identifier

Product Identity

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Alternate Names

Resin System Curing Agent
Product Code(s): 1196, 1197

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use

Curing agent for resin system used for quick curing, waterproof repair of fiberglass, glass, metal or wood; or to bond two of these materials together.

1.3. Details of the supplier of the safety data sheet

Company Name

Life Industries Corporation
4060 Bridge View Drive
N. Charleston, SC 29405

Emergency

CHEMTREC (USA)

(800) 424-9300

24 hour Emergency Telephone No.

USA: 1-800-424-9300

Outside USA: +1-703-527-3887

Customer Service: Life Industries Corporation

+1-843-566-1225

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Acute Tox. 4;H302

Harmful if swallowed.

Acute Tox. 5;H313

May be harmful in contact with skin. (Not adopted by US OSHA)

Skin Corr. 1B;H314

Causes severe skin burns and eye damage.

Eye Dam. 1;H318

Causes serious eye damage.

Skin Sens. 1;H317

May cause an allergic skin reaction.

Repr. 2;H361

Suspected of damaging fertility or the unborn child.

Aquatic Chronic 1;H410

Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



Danger

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H302 Harmful if swallowed.

H313 May be harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H361 Suspected of damaging fertility or the unborn child.

H410 Very toxic to aquatic life with long lasting effects.

[Prevention]:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P301+312 IF SWALLOWED: Call a POISON CENTER or doctor / physician if you feel unwell.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P308+313 IF exposed or concerned: Get medical advice / attention.

P310 Immediately call a POISON CENTER or doctor / physician.

P321 Specific treatment (see information on this label).

P330 Rinse mouth.

P331 Do NOT induce vomiting.

P333+313 If skin irritation or a rash occurs: Get medical advice / attention.

P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

[Storage]:

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

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3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
2-piperazin-1-ethylamine CAS Number: 0000140-31-8	10 - 25	Acute Tox. 4;H312 Acute Tox. 4;H302 Skin Corr. 1B;H314 Skin Sens. 1;H317 Aquatic Chronic 3;H412	[1]
Nonylphenol CAS Number: 0025154-52-3	10 - 25	Repr. 2;H361fd Acute Tox. 4;H302 Skin Corr. 1B;H314 Aquatic Acute 1;H400 Aquatic Chronic 1;H410	[1]
Phenol, 2-nonyl-, branched CAS Number: 0091672-41-2	1.0 - 10	Acute Tox. 4;H302 Skin Corr. 1B;H314 Eye Dam. 1;H318 Repr. 2;H361 Aquatic Acute 1;H400 Aquatic Chronic 1;H410	[1]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General	Notes to physicians or first aid providers: Treat symptomatically and supportively.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview Potential Acute Health Effects: Corrosive. May cause redness, pain & skin burns

Eyes: Severe irritation

Skin: Severe irritation

Ingestion: Corrosive. May cause sore throat, abdominal pain, nausea & severe burns of the mouth, throat & stomach

Inhalation: Vapors or mist are irritating & cause sneezing. Coughing & discomfort in the sinus cavities

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	See section 2 for further details.
Eyes	Causes serious eye damage.
Skin	May be harmful in contact with skin. May cause an allergic skin reaction. Causes severe skin burns and eye damage.
Ingestion	Harmful if swallowed.

5. Fire-fighting measures

5.1. Extinguishing media

Dry chemical, carbon dioxide, fog, foam.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Ammonia, phenols and amines

Avoid breathing dust / fume / gas / mist / vapors / spray.

5.3. Advice for fire-fighters

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

None

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Confine spill & place in a closed container. Wipe up excess with dry rags & place in a closed container

7. Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin & eyes by using personal protective equipment.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Incompatible materials: Strong oxidizing agents, chloroformates, acids, acid anhydrides and acid chlorides.

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See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000140-31-8	2-piperazin-1-ethylamine	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0025154-52-3	Nonylphenol	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0091672-41-2	Phenol, 2-nonyl-, branched	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000140-31-8	2-piperazin-1-ethylamine	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0025154-52-3	Nonylphenol	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0091672-41-2	Phenol, 2-nonyl-, branched	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

8.2. Exposure controls

Respiratory

Not generally required.

Eyes

Chemical safety goggles

Skin

Wear impervious clothing, including gloves and long sleeves, as appropriate, to prevent skin contact.

Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits

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suitable respiratory protection must be worn.

Other Work Practices Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance	Amber Liquid
Odor	Mild ammonia
Odor threshold	Not determined
pH	10
Melting point / freezing point	Not Applicable
Initial boiling point and boiling range	Not Applicable
Flash Point	Not Measured
Evaporation rate (Ether = 1)	Not Applicable
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Measured Upper Explosive Limit: Not Measured
Vapor pressure (Pa)	Not Applicable
Vapor Density	Not Applicable
Specific Gravity	Not Applicable
Solubility in Water	Partial
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	>400°F (204°C)
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
Density	Not Measured

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

This product must be mixed with another component to react, and is not sensitive to mechanical shock.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

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10.5. Incompatible materials

Strong oxidizing agents, chloroformates, acids, acid anhydrides and acid chlorides.

10.6. Hazardous decomposition products

Ammonia, phenols and amines

11. Toxicological information

Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
2-piperazin-1-ethylamine - (140-31-8)	2,107.50, Rat - Category: 5	866.80, Rabbit - Category: 3	No data available	No data available	No data available
Nonylphenol - (25154-52-3)	580.00, Rat - Category: 4	2,000.00, Rabbit - Category: 4	No data available	No data available	No data available
Phenol, 2-nonyl-, branched - (91672-41-2)	No data available	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	4	Harmful if swallowed.
Acute toxicity (dermal)	5	May be harmful in contact with skin. (Not adopted by US OSHA)
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	1B	Causes severe skin burns and eye damage.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	1	May cause an allergic skin reaction.
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	2	Suspected of damaging fertility or the unborn child.
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

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12. Ecological information

12.1. Toxicity

Very toxic to aquatic life with long lasting effects.

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
2-piperazin-1-ethylamine - (140-31-8)	100.00, Oncorhynchus mykiss	32.00, Daphnia magna	495.00 (72 hr), Pseudokirchneriella subcapitata
Nonylphenol - (25154-52-3)	0.135, Pimephales promelas	0.104, Daphnia magna	1.30 (72 hr), Scenedesmus subspicatus
Phenol, 2-nonyl-, branched - (91672-41-2)	Not Available	Not Available	Not Available

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	UN2815	UN2815	UN2815
14.2. UN proper shipping name	UN2815, N-Aminoethylpiperazine, 8, III	N-Aminoethylpiperazine	N-Aminoethylpiperazine
14.3. Transport hazard class(es)	DOT Hazard Class: 8	IMDG: 8 Sub Class: Not Applicable	Air Class: 8
14.4. Packing group	III	III	III

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14.5. Environmental hazards

IMDG Marine Pollutant: Yes (Nonylphenol)

14.6. Special precautions for user

No further information

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification D2A E

US EPA Tier II Hazards

Fire: No

Sudden Release of Pressure: No

Reactive: No

Immediate (Acute): Yes

Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

2-piperazin-1-ethylamine

Pennsylvania RTK Substances (>1%):

2-piperazin-1-ethylamine

Nonylphenol

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16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H361 Suspected of damaging fertility or the unborn child.

H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

DISCLAIMER: The information and recommendations contained herein are based upon data believed to be correct. Life Industries Corporation assumes no liability for misinterpretation of the data contained within this form as any type of warranty or guarantee of the product.

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