

SAFETY DATA SHEET

1. Product Identification

Product name Rot Fix Resin, Part A

SDS Number 1500A00

Product type Epoxy polymer mixture

Recommended use of the chemical and

restrictions on use

Rot repair resin component.

Restrictions None known.

Manufacturer/Supplier information

Company name SYSTEM THREE RESINS, INC.

Address 8517 Commerce Place Dr NE

Lacey, WA 98516

United States

Telephone 1-253-333-8118

Website www.systemthree.com

Email support@systemthree.com

Emergency Contact CHEMTEL (U.S. and CANADA) 1-800-704-9215

CHEMTEL (Outside the U.S.) – Call Collect accepted +1-360-256-7365

2. Hazard(s) Identification

Classification of substance or WARNING

mixture/Signal Word Skin Corrosion/Irritation - Category 2

Serious Eye Damage/Eye Irritation - Category 2

Skin Sensitization - Category 1

Specific Target Organ Toxicity (Single Exposure) [Respiratory tract irritation] -

Category 3

GHS Label Elements

Hazard Pictograms



Hazard Statements/Classification of

Classification of H315 Causes skin irritation.

substance or mixture H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

Precautionary statements

<u>Precautionary Statements</u> P201 Obtain special instructions before use.

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

understood.

P264 Wash hands thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the

workplace.

P280 Wear protective gloves/protective clothing/eye protection/face

protection.

Response P304 + 340 IF INHALED: Remove victim to fresh air and keep at rest in a

position comfortable for breathing.

P313 Call a POISON CENTER or doctor/physician if you feel unwell. P302+352+363 IF ON SKIN: Wash with soap and water. Take off

contaminated clothing and wash before reuse.

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 + P313 If exposed or concerned: Get medical attention.

Storage P401 Store at room temperature in a well-ventilated area.

P501 Dispose of contents and container in accordance with all local,

regional, national and international regulations.

Hazards not otherwise classified (HNOC) None Available.

3. Composition/Information On Ingredients

Chemical Name	CAS Number	Content (%)
Diglycidyl Ether of Bisphenol A	25068-38-6	40 – 50 %
Alkyl Glycidyl Ether	17557-23-2	35 – 45 %
Benzyl Alcohol	100-51-6	1 – 10 %
Diglycidyl Ether of Bisphenol F	28064-14-4	1-10%

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

4. First-Aid Measures

Disposal

Skin contact Remove contaminated clothing and shoes and wipe excess off skin. Flush skin

with water. Follow by washing in soap and water. If irritation occurs, seek medical attention. Do not reuse clothing until cleaned. Contaminated leather

articles (shoes) cannot be decontaminated and should be destroyed.

Eye contact Immediately flush eyes with plenty of water, occasionally lifting the upper and

lower eyelids. Check for and remove contact lenses. Continue to rinse for at

least 10 minutes. Get medical attention.

Ingestion Do not induce vomiting unless directed to do so by medical personnel. If

material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get

medical attention immediately.

Inhalation Remove victim to fresh air and provide oxygen if breathing is difficult. Give

artificial respiration if not breathing. Get medical attention.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically. Contact poison treatment specialist immediately if

large quantities have been ingested or inhaled.

Specific treatments No specific treatment.

5. Fire-Fighting Measures

Suitable extinguishing media
Unsuitable extinguishing media
Specific hazards arising from the chemical

Alcohol-resistant foam, carbon dioxide (CO₂), dry chemical, water fog.

None known.

In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated must be contained and prevented from being discharged to any

waterway, sewer or drain.

Hazardous decomposition products Decomposition products may include the following materials:

Carbon dioxide
Carbon monoxide

Special protective actions for fire-fighters Promptly isolate the scene by removing all persons from the vicinity of the

incident if there is a fire. No action shall be taken involving any personal risk or

without suitable training.

Special protective equipment for firefighters Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure

mo

Further information Do not allow run-off from firefighting to enter drains or water courses. Fire

residues and contaminated fire extinguishing water must be disposed of in

accordance with local regulations.

6. Accidental Release Measures

Personal precautions Wear proper personal protective equipment (PPE). Avoid direct contact with

material. Proper PPE includes: disposable gloves, eye protection and skin

protection.

Emergency procedures If material is spilled, avoid contact with material. Persons not wearing

appropriate protective equipment should leave the area of the spill until

cleanup is complete.

Methods and materials for containment/cleanup

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as

the spilled product.

Environmental precautions Avoid dispersal of spilled material and runoff and contact with soil, waterways,

drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Collect spillage.

7. Handling and Storage

Precautions for safe handlingAvoid contact with skin and eyes. Emergency showers and eye wash stations

should be readily accessible. Adhere to work practice rules established by government regulations. Use personal protective equipment. When using, do

not eat, drink or smoke.

Precautions/Recommendations for safe/proper storage

Store epoxy products in temperature stable environment, out of the reach of pets or children. Securely fasten container lids and tops, and prevent products

from sitting and below freezing temperatures.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits Not established.

gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below

any recommended or statutory limits.

Environmental exposure controlsUse appropriate containment to avoid environmental contamination. Do not

allow spill to enter sewers or waterways.

Individual protection measures/Personal

protective equipment

Eye/face protection Splash-proof goggles or safety spectacles with side shields are recommended.

Always wear eye protection when sanding cured epoxy resins to avoid dust in

eyes.

Hand protection Always wear impervious gloves: butyl rubber, nitrile rubber, Neoprene, PVC

disposable gloves,

Skin protection Wear clean, body-covering clothing to avoid skin contact.

Respiratory protectionUse a properly fitted, air-purifying or air-fed respirator complying with an

approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards

of the product and the safe working limits of the selected respirator.

Special instructions for protection and

hygiene

Wear gloves at all times when handling product, avoid direct contact with skin.

When finished using product, dispose of gloves properly and wash hands with

warm, soapy water.

9. Physical and Chemical Properties

Chemical family Epoxy Resin

Appearance Clear liquid

Physical State Epoxy polymer mixture

Form Liquid

Color Water clear

Odor Mild

Density (Specific Gravity) 9.31 lb/gal (1.1-1.2)

Viscosity 150 - 200 cps @ 25°C

pH Not available

Melting point/freezing point Not available

Initial boiling point and boiling rangeNot available

Flash point Not available

Evaporation rate Slower than ether

Flammability (solid, gas) Not available

Upper/lower flammability limit (by volume) Not available

Material VOC None

Vapor density Heavier than air
Relative density Not determined

Solubility in water Negligible, in water

Partition coefficient: n-octanol/waterNot availableAuto-ignition temperatureNot availableDecomposition temperatureNot available

10. Stability and Reactivity

Reactivity No specific test data related to reactivity available for this product.

Chemical Stability Stable under normal conditions.

Possibility of hazardous reactions Hazardous polymerization will not occur.

Conditions to avoid Epoxy resins and epoxy resin hardeners react with each other producing heat.

They should not be mixed with each other under uncontrolled conditions or in large mass as the ensuing exotherm may result in heat and smoke, resulting in

hazardous decomposition products.

Incompatible materials Strong oxidizing and reducing agents. Lewis and mineral acids.

Hazardous decomposition productsOxides of carbon, aldehydes, and acids.

Other hazards None known.

11. Toxicological Information

Acute Health Hazard (components)

No comprehensive data (ingestion, inhalation, dermal) on mixture (product).

Component	Result	Species	Dose	Exposure
Diglycidyl Ether of Bisphenol A	LD50 Oral	Rat	11,400 mg/kg	-
	LD50 Dermal	Rat	2,000 mg/kg	-
Diglycidyl Ether of Bisphenol F	LD50 Oral	Rat	>2,000 mg/kg	-
	LD50 Dermal	Rat	>2,000 mg/kg	-
Alkyl Glycidyl Ether	LD50 Oral	Rat	4,500 mg/kg	-
	LD50 Dermal	Rabbit	>2,000 mg/kg	-
Benzyl Alcohol	LD50 Oral	Rat	1620 mg/kg	-
	LC50 Inhalation	Rat	>4178 mg/m3	4 h, aerosol

Irritation/Corrosion (components)

No information on product itself.

Component	Result	Species	Test	Exposure
Diglycidyl Ether of Bisphenol A	Moderate to severe irritation	Rabbit	Skin	4 h
	Mild irritation	Rabbit	Eye	24 h
Diglycidyl Ether of Bisphenol F	Mild irritant	Rabbit	Skin	-
	Mild irritant	Rabbit	Eye	-
Benzyl Alcohol	Irritant	Rabbit	Eye	-

SensitizationNo information on product itself.MutagenicityNo information on product itself.CarcinogenicityNo information on product itself.Reproductive ToxicityNo information on product itself.

Teratogenicity No information on product itself. Specific target organ toxicity (single No information on product itself.

exposure)

exposure)

Component	Category	Route of exposure	Target organs
Diglycidyl Ether of Bisphenol A	Category 3	-	Respiratory tract irritation
Diglycidyl Ether of Bisphenol F	Category 3	-	Respiratory tract irritation
Alkyl Glycidyl Ether	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated

No information on product itself.

Aspiration hazard No information on product itself.

Potential acute health effects

Eye Contact Causes serious eye irritation. Inhalation May cause respiratory irritation.

Skin Contact Causes skin irritation. May cause an allergic skin reaction.

Ingestion Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical

and toxicological characteristics

Eye Contact Adverse symptoms may include the following:

> Pain Watering Redness

Inhalation Adverse symptoms may include the following:

Respiratory tract irritation

Coughing

Skin Contact Adverse symptoms may include the following:

> Irritation Redness

Ingestion No specific data.

Delayed and immediate effects and also chronic effects from short and long term

exposure

Potential chronic health effects

General Once sensitized, a severe allergic reaction may occur when subsequently

exposed to very low levels.

Carcinogenicity No known significant effects or critical hazards. Mutagenicity No known significant effects or critical hazards. **Teratogenicity** No known significant effects or critical hazards. **Developmental effects** No known significant effects or critical hazards. **Fertility effects** No known significant effects or critical hazards.

Numerical measures of toxicity

Not available Acute toxicity estimates (ATEmix)

12. Ecological Information

Ecotoxicity

No information on product itself.

Component	Result	Species	Exposure
Diglycidyl Ether of Bisphenol A	Acute LC50 1.3 mg/l	Fish	96 h
	Acute LC50 2.1 mg/l	Daphnia	48 h
Diglycidyl Ether of Bisphenol F	Acute LC50 1.5 mg/l	Fish	96 h
	Acute LC50 1.7 mg/l	Daphnia	48 h
	Chronic NOEC 0.3 mg/l	Daphnia	21 d
Benzyl Alcohol	Acute LC50 460 mg/l	Fish	96 h
	Acute EC50 230 mg/l	Invertebrates	48 h
	Chronic NOEC 310 mg/l	Algae	72 h

Persistence and degradability

No information on product itself.

Bioaccumulative Potential

No information on product itself.

Component	LogPow	BCF	Potential
Diglycidyl Ether of Bisphenol A	2.64 – 3.78	3 – 31 31.00	low
Diglycidyl Ether of Bisphenol F	3	-	low
Benzyl Alcohol	1.05	1.37 (calculated)	-

Mobility in Soil

Soil/water partition coefficient (KOC)

No information on product itself.

Other adverse effects

No known significant effects or critical hazards.

13. Disposal Considerations

Waste from residues/ unused products

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Product should not be allowed to enter drains, water courses or the soil; dispose of this material and its containers in a safe way. Contact supplier if guidance is required.

Contaminated packaging

Dispose of container and unused contents in accordance with federal, state and local requirements.

14.Transport Information

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

International Transport Regulations

Regulatory information	UN/NA number	Proper Shipping Name	Classes/*PG	Additional Information
DOT		Non-regulated		
TDG		Non-regulated		

IMO/IMDG UN3082 Environmentally hazardous substance, Class 9 III

liquid, n.o.s. (Bisphenol-A

Epichlorohydrin Resin)

IATA UN3082 Environmentally hazardous substance, Class 9 III

liquid, n.o.s. (Bisphenol-A Epichlorohydrin Resin)

*PG: Packing group

Special precautions for user: Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to

do in the event of an accident or spillage.

15. Regulatory Information

UNITED STATES

U.S. Federal Regulations United States – TSCA 12(b) – Chemical export notification: None Required.

United States – TSCA 5(a)2 – Final significant new use rules: Not Listed.
United States – TSCA 5(a)2 – Proposed significant new use rules: Not Listed.

United States – TSCA 5(e) – Substance consent order: Not listed.

Clean Air Act - Ozone Depleting

Substances (ODS)

This product does not contain nor is it manufactured with ozone depleting

substances.

Clean Air Act Section 112(b) Hazardous

Air Pollutants (HAPs)
California Prop. 65

None

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer. WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or

other reproductive harm.

Ingredient Name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Oxirane, 2-(phenoxymethyl)-	Yes	No	5 μg/day	No
Oxirane, 2-(chloromethyl)-	Yes	Yes	9 μg/day	No

EPA SARA 302 Extremely Hazardous

Substances

EPA SARA 302/304/311/312 Hazardous

Acute Health Hazard

Chemicals

SARA 313

None required

None required

Form R – Reporting requirements

United States inventory (TSCA 8b)

All components are listed or exempted.

CANADA

WHMIS (Canada) Class D-2B: Material causing other toxic effects (Toxic).

Canadian NPRINone requiredCEPA Toxic substancesNone required

INTERNATIONAL REGULATIONS

International Lists Australia inventory (AICS): All components are listed or exempted.

Canada inventory: All components are listed or exempted. **Korea inventory:** All components are listed or exempted. **Japan inventory:** All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

New Zealand inventory (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): All components are listed or exempted. Taiwan inventory (CSNN): All components are listed or exempted.

16. Other Information, Including Date of Preparation or Last Revision

HMIS Rating



Date of Preparation January 22, 2020

Date of Last Revision September 26, 2019

Revision # 4.0

More Information 1-253-333-8118

Prepared by System Three Resins Inc.

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