Safety Data Sheets (SDS)
Updated: January 1, 2023

This file contains Safety Data Sheets for Pennant Epoxy Primer (formerly known as SilverTip Yacht Primer). This is a two-component system. It is imperative that you know whether you need information on the Resin or the Hardener.

If this is a medical emergency, call 911 or your local poison control center. Seek medical attention.

For technical assistance, call System Three Technical Support at 253-333-8118 option 2.

These SDS are provided pursuant to 29 CFR 1910.1200(g).

SAFETY DATA SHEET

1. Product Identification

Product name	SilverTip Yacht Primer, Part A
SDS Number	1710A00
Product type	Epoxy Resin Mixture
Recommended use of the chemical and restrictions on use	Paint primer for marine use.
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 mixture/Signal Word

WARNING
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 substance or mixture

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statements

Precautionary Statements
Prevention

P261 Avoid breathing vapors.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
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.
Disposal	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	50 – 60%
Dipropylene glycol n-butyl ether	29911-28-2	25 – 30%
Dipropylene glycol dimethyl ether	111109-77-4	15 – 20%

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

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	Alcohol-resistant foam, carbon dioxide (CO_2), dry chemical, water fog.
Unsuitable extinguishing media	None known.

Specific hazards arising from the chemical	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 fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
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 materials 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 handling	Avoid 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	None established.
Appropriate engineering controls	Use only with adequate ventilation. If user operations generate dust, fumes, 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 controls	Use 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 protection	Use 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 resin mixture
Form	Liquid
Color	Water clear
Odor	Low odor
Density (Specific Gravity)	8.9-9.2 lbs./gal (1.07-1.1 g/cm^3)
Viscosity	50 cps @ 25°C
pH	Data not available
Melting point/freezing point	Not applicable
Initial boiling point and boiling range	Not applicable
Flash point	175°F, Pensky-Martens Closed Cup
Evaporation rate	Slower than ether
Flammability (solid, gas)	Data not available
Upper/lower flammability limit (by volume)	Data not available
Material VOC	400 – 450 grams/liter
Vapor density	Heavier than air
Relative density	Not determined
Solubility in water	Negligible, in water
Partition coefficient: n-octanol/water	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not 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 products	Oxides 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	-
Dipropylene glycol n-butyl ether	LD50 Oral	Rat	3,700 mg/kg	-
	LD50 Dermal	Rat	>2,000 mg/kg	
	LC50 Inhalation	Rat	>2.04 mg/l	4 h
Dipropylene glycol dimethyl ether	LD50 Oral	Rat	3,300 mg/kg	-
	LD50 Dermal	Rat	>2,000 mg/kg	-
	LC50 Inhalation	Rat	>5.25 mg/l	4 h

Irritation/Corrosion (components) No information on the 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
Dipropylene glycol n-butyl ether	Slight irritation	Rat	Skin	-
Dipropylene glycol dimethyl ether	Slight irritation	-	Eye	-

Sensitization No information on the product itself.

Mutagenicity No information on the product itself.

Carcinogenicity No information on the product itself.

Reproductive Toxicity No information on the product itself.

Teratogenicity No information on the product itself.

Specific target organ toxicity (single exposure) No information on the product itself.

Component	Category	Route of exposure	Target organs

Diglycidyl Ether of Bisphenol A	Category 3		Respiratory tract irritation

Specific target organ toxicity (repeated exposure) No information on the product itself.

Aspiration hazard No information on the 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 Not available.

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

Acute toxicity estimates (ATEmix) No specific data.

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
Dipropylene glycol n-butyl ether	Acute LC50 >1,000 mg/l	Daphnia	48 h
	Acute LC50 841 mg/l	Guppy	96 h

Dipropylene glycol dimethyl ether	Acute LC50 >1,000 mg/l	Guppy	96 h
	Acute LC50 >1,000 mg/l	Daphnia	24 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	3	-	Low
Dipropylene glycol n-butyl ether	<3	<100	Low
Dipropylene glycol dimethyl ether	<3	<100	Low

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, liquid, n.o.s. (Bisphenol-A Epichlorohydrin Resin)	Class 9 III	
IATA	UN3082	Environmentally hazardous substance, liquid, n.o.s. (Bisphenol-A Epichlorohydrin Resin)	Class 9 III	

*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)
None.

California Prop. 65
WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

Ingredient Name	Cancer	Reproductive
Oxirane, 2-(phenoxymethyl)-	Yes	No

EPA SARA 302 Extremely Hazardous Substances
None required.

EPA SARA 302/304/311/312 Hazardous Chemicals
Acute Health Hazard

SARA 313
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 NPRI
None required.

CEPA Toxic substances
None 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

Health 2
Flammability 1
Physical Hazard 0

Date of Preparation January 14, 2020

Date of Last Revision September 27, 2019

Revision # 4.0

More Information 1-253-333-8118

Prepared by System Three Resins Inc.

The information contained herein is based on the data available to us and is believed to be correct. However, System Three Resins, Inc. makes no warranty, expressed or implied, regarding the accuracy of these data or the results to be obtained from the use thereof. System Three assumes no responsibility for injury from the use of the product described herein.

SAFETY DATA SHEET

1. Product Identification

Product name	SilverTip® Yacht Primer, Part B
SDS Number	1710B00
Product type	Polyamide Coating Hardener
Recommended use of the chemical and restrictions on use	Paint primer for marine use.
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 mixture/Signal Word	WARNING Skin Corrosion/Irritation - Category 2 Serious Eye Damage/Eye Irritation - Category 1 Skin Sensitization - Category 1
GHS Label Elements **Hazard Pictograms**	
Hazard Statements/Classification of substance or mixture	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye damage.
Precautionary statements	
Precautionary Statements **Prevention**	P261 Avoid breathing vapors. P264 Wash hands thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. 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.

Disposal 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 (%)
Polyamide Resin	Trade Secret	15 – 25%
Titanium Dioxide	13463-67-7	10 – 15%
Isopropyl Alcohol	67-63-0	1 – 2%

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

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 Alcohol-resistant foam, carbon dioxide (CO_2), dry chemical, water fog.

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical Potential skin irritation. Toxic fumes may be evolved when this substance is burned. Incomplete combustion may for carbon monoxide. Downwind personnel must be evacuated.

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 fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
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 materials 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 handling	Avoid 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	None established.
Appropriate engineering controls	Use only with adequate ventilation. If user operations generate dust, fumes, 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 controls	Use 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 protection	Use 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 Hardener
Appearance	Gray liquid
Physical State	Polyamide/water mixture
Form	Liquid
Color	Gray
Odor	Mild
Density (Specific Gravity)	11.5 – 11.7 lbs/gal (1.38 – 1.40 g/cm³)
Viscosity	2,300 – 2,500 CPS @ 25°C
pH	9.57
Melting point/freezing point	Not applicable
Initial boiling point and boiling range	Not applicable
Flash point	>212°F (>100°C), Pensky-Martens Closed Cup
Evaporation rate	Slower than ether
Flammability (solid, gas)	Data not available
Upper/lower flammability limit (by volume)	Data not available
Material VOC	
Vapor density	Heavier than air
Relative density	Not determined
Solubility in water	Negligible, in water
Partition coefficient: n-octanol/water	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not 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	None known.
Incompatible materials	Strong oxidizing and reducing agents. Lewis and mineral acids.
Hazardous decomposition products	Oxides 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
Polyamide Resin	LD50 Oral	Rat	2,960 mg/kg	-
	LD50 Dermal	Rabbit	>5,000 mg/kg	-

Irritation/Corrosion (components) No information on the product itself.

Component	Result	Species	Test	Exposure
Polyamide Resin	Moderate irritation	-	-	-
	Severe eye irritation	-	-	-

Sensitization No information on the product itself.

Mutagenicity No information on the product itself.

Carcinogenicity No information on the product itself.

Reproductive Toxicity No information on the product itself.

Teratogenicity No information on the product itself.

Specific target organ toxicity (single exposure) No information on the product itself.

Specific target organ toxicity (repeated exposure) No information on the product itself.

Aspiration hazard No information on the product itself.

Potential acute health effects

Eye Contact Causes serious eye damage.

Inhalation May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.

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

Ingestion No specific data.

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 — Not available.

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

Acute toxicity estimates (ATEmix) — No specific data.

12. Ecological Information

Ecotoxicity — No information on product itself.

Component	Result	Species	Exposure
Isopropyl Alcohol	Acute LC50: 10,000 mg/l	Artemia salina	24 h
	Acute LC50: 10,000 mg/l	Daphnia magna	24 h
	Acute LC50: 900 – 1,950 gm/l	Crangon crangon	48 h
	Acute LC50: 750 – 1,650 gm/l	Crangon crangon	96 h

Persistence and degradability — No information on product itself.

Bioaccumulative Potential — No information on product itself.

Component	LogPow	BCF	Potential
Isopropyl Alcohol	0.05	-	-

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		Non-regulated		
IATA		Non-regulated		

*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)	None.
California Prop. 65	This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other harm.
EPA SARA 302 Extremely Hazardous Substances	None required.
EPA SARA 302/304/311/312 Hazardous Chemicals	None.
SARA 313	None required.
Form R – Reporting requirements	
United States inventory (TSCA 8b)	All components are listed or exempted.

CANADA

WHMIS (Canada)	None.
Canadian NPRI	None required.
CEPA Toxic substances	None 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

Health	**2**
Flammability	**1**
Physical Hazard	**0**

Date of Preparation	January 14, 2020
Date of Last Revision	September 27, 2019
Revision #	4.0
More Information	1-253-333-8118
Prepared by	System Three Resins Inc.

The information contained herein is based on the data available to us and is believed to be correct. However, System Three Resins, Inc. makes no warranty, expressed or implied, regarding the accuracy of these data or the results to be obtained from the use thereof. System Three assumes no responsibility for injury from the use of the product described herein.