SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Revision Date: *30-Sep-2024* **Revision Number:** 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	**SPARKLETUFF™ ANTI-SLIP FLOOR COATING – PART A**
Product Class	EPOXY COATING
Color	White
Recommended use	EPOXY COATING
Restrictions on use	No information available

Manufactured For
Safety Direct America
26705 Loma Verde
Mission Viejo, CA92691
Phone: (949) 933-6971
www.safetydirectamerica.com

Emergency Telephone
(949) 933-6971 (Normal Business Hours)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 2 Sub-category B
Skin sensitization	Category 1

Label elements

Warning

Hazard statements
Causes eye irritation
May cause an allergic skin reaction

Appearance liquid **Odor** little or no odor

Precautionary Statements - Prevention
Avoid breathing vapor.
Wear protective gloves/protective clothing/eye protection/face protection
Wash hands thoroughly after handling
Contaminated work clothing should not be allowed out of the workplace

Eyes
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical attention.
Skin
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse

Precautionary Statements - Storage
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Not applicable

Other information
Reacts with water forming methanol.

Other hazards
IMPORTANT: Designed to be mixed with other components. Mixture will have hazards of all components. Before opening packages, read all warning labels. Follow all precautions.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Aluminum oxide	1344-28-1	45 - 55
Cyclohexanol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane	30583-72-3	20 - 30
Siloxanes and Silicones, di-Me, reaction products with silica	67762-90-7	1 - 5

4. FIRST AID MEASURES

General Advice	Call a poison control center or doctor for treatment advice. Have the product containers or label with you when calling a poison control center or doctor or going for treatment.
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes Continue to rinse for at least 10 minutes. In the case of skin irritation or allergic reactions see a physician. Wash clothing before reuse. Destroy contaminated articles such as shoes.
Inhalation	Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration. Call a physician immediately.
Ingestion	Rinse mouth with water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Protection Of First Aiders	Use personal protective equipment.
Most Important Symptoms/Effects	Eye irritation. Skin irritation. May cause allergic skin reaction.
Notes To Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Protective Equipment And Precautions For Firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

Hazardous combustion products	Thermal decomposition can lead to release of irritating gases and vapors.
Specific Hazards Arising From The Chemical	Closed containers may rupture if exposed to fire or extreme heat. Keep product and empty container away from heat and sources of ignition. Use water spray to keep fire-exposed containers cool.
Sensitivity To Mechanical Impact	No
Sensitivity To Static Discharge	No

Flash Point Data

Flash Point (°F)	212
Flash Point (°C)	100
Method	PMCC

Flammability Limits In Air

Lower flammability limit:	Not available
Upper flammability limit:	Not available

NFPA **Health:** 2 **Flammability:** 1 **Instability:** 0 **Special:** Not Applicable

NFPA Legend
0 - Not Hazardous
1 - Slightly
2 - Moderate
3 - High
4 - Severe

The ratings assigned are only suggested ratings, the contractor/employer has ultimate responsibilities for NFPA ratings where this system is used.

Additional information regarding the NFPA rating system is available from the National Fire Protection Agency (NFPA) at www.nfpa.org.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and inhalation of vapors. Ensure adequate ventilation.
Other Information	Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.
Environmental precautions	See Section 12 for additional Ecological Information.
Methods for Cleaning Up	Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling

Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist. Wear personal protective equipment. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Store in original container or an approved alternative made from a compatible material. Keep in properly labeled containers. Empty containers retain product residue and can be hazardous. Do not reuse container. Keep out of the reach of children.

Incompatible Materials

Incompatible with strong acids and bases and strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

Component	ACGIH	OSHA
Aluminum oxide	TLV TWA: 1 mg/m3	PEL (Vacated) TWA: 10 mg/m3 (Vacated) TWA: 5 mg/m3 TWA: 15 mg/m3 TWA: 5 mg/m3
Cyclohexanol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane	N/E	N/E
Siloxanes and Silicones, di-Me, reaction products with silica	PNOS: 10 mg/m³, TWA, Inhalable 3 mg/m³, TWA, Respirable	PEL: 15 mg/m³, TWA, Total dust 5 mg/m³, TWA, Respirable

Legend
ACGIH - American Conference of Governmental Industrial Hygienists Exposure Limits
OSHA - Occupational Safety & Health Administration Exposure Limits
N/E - Not Established

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal Protective Equipment

Eye/Face Protection
Tightly fitting safety goggles If splashes are likely to occur, wear: Face-shield

Skin Protection
Long sleeved clothing. Protective gloves.

Respiratory Protection
In operations where exposure limits are exceeded, use a NIOSH approved respirator that has been selected by a technically qualified person for the specific work conditions. When spraying the product or applying in confined areas, wear a NIOSH approved respirator specified for paint spray or organic vapors.

Hygiene Measures

Avoid contact with skin, eyes and clothing. Do not breathe vapors/dust. Remove and wash contaminated clothing before re-use. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Viscous, white liquid
Odor	little or no odor
Odor Threshold	No information available
Density (lbs./gal)	14.56

Specific Gravity	1.75
pH	No information available
Viscosity (cps)	No information available
Solubility(ies)	No information available
Water solubility	No information available
Evaporation Rate	No information available
Vapor pressure @20 °C (kPa)	No information available
Vapor density	No information available
Wt. % Solids	95 - 100
Vol. % Solids	No information available
Wt. % Volatiles	0 – 5
Vol. % Volatiles	No information available
VOC Regulatory Limit (g/L)	< 50
Boiling Point (°F)	No information available
Boiling Point (°C)	No information available
Freezing Point (°F)	No information available
Freezing Point (°C)	No information available
Flash Point (°F)	212
Flash Point (°C)	100
Method	PMCC
Flammability (solid, gas)	Not applicable
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Autoignition Temperature (°F)	No information available
Autoignition Temperature (°C)	No information available
Decomposition Temperature (°F)	No information available
Decomposition Temperature (°C)	No information available
Partition coefficient	No information available

10. STABILITY AND REACTIVITY

Reactivity	Reacts with water
Chemical Stability	Stable under normal conditions.
Conditions to avoid	Avoid contact with moisture. Strong oxidizer, Caustic soda (sodium hydroxide) can induce vigorous polymerization at temperatures around 200 °C.
Incompatible Materials	Incompatible with strong acids and bases and strong oxidizing agents.
Hazardous Decomposition Products	Thermal decomposition can lead to release of irritating or toxic gases and vapors.
Possibility of hazardous reactions	Reacts with water forming methanol. Can react with strong oxidizing agents. When heated to temperatures above 150 °C (300 °F) in the presence of air, trace quantities of formaldehyde may be released. Adequate ventilation is required. Reacts with considerable heat release with some curing agents. Polymerizes exothermically with amines, mercaptans and Lewis acids at ambient temperature and above.

11. TOXICOLOGICAL INFORMATION

Product Information

Information on likely routes of exposure

Principal Routes of Exposure Eye contact, skin contact and inhalation.

Acute Toxicity

Product Information No information available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Eye contact Contact with eyes causes irritation with watering and redness.
Skin contact May cause skin irritation and/or dermatitis. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Repeated exposure may cause skin dryness or cracking.
Ingestion Ingestion may cause irritation to mucous membranes. May be irritating to mouth, throat and stomach.
Inhalation At room temperature, exposure to vapor is minimal due to low volatility; single exposure is not likely to be hazardous.
Sensitization May cause sensitization by skin contact.
Neurological Effects No information available.
Mutagenic Effects No information available.
Reproductive Effects No information available.
Developmental Effects No information available.
Target organ effects No information available.
STOT - repeated exposure No information available.
STOT - single exposure No information available.
Other adverse effects No information available.
Aspiration Hazard No information available.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

No information available.

Component Information

Acute Toxicity

Aluminum oxide
LD50/oral/rat = > 5000 mg/kg.
LC50 > 2.3 mg/l 4 h (OECD Guideline 403)

Cyclohexanol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane
LD50 Oral: >2000 mg/kg (Rat)
LD50 Dermal: > 2000 mg/kg (Rat)

Siloxanes and Silicones, di-Me, reaction products with silica
LD50/oral/rat = > 5000 mg/kg.

LD50/dermal/rabbit = > 2000 mg/kg

Methanol
Lethal Dose, Humans, 340 mg/kg Estimated.
LD50, Rabbit, 15,800 mg/kg
LC50, Rat, 4 Hour, vapor, 3 mg/l

Carcinogenicity
There are no known carcinogenic chemicals in this product above reportable levels.

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects
The environmental impact of this product has not been fully investigated.

Product Information

Acute Toxicity to Fish
No information available

Acute Toxicity to Aquatic Invertebrates
No information available

Acute Toxicity to Aquatic Plants
No information available

Persistence / Degradability
No information available.

Bioaccumulation
No information available.

Mobility in Environmental Media
No information available.

Ozone
No information available

Component Information

Acute Toxicity to Fish
No information available

Acute Toxicity to Aquatic Invertebrates
No information available

Acute Toxicity to Aquatic Plants
No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method	Dispose of in accordance with federal, state, and local regulations. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal options.
Empty Container Warning	Emptied containers may retain product residue. Follow label warnings even after container is emptied. Do not re-use containers for any purpose.

14. TRANSPORT INFORMATION

DOT Not regulated

ICAO / IATA Contact the preparer for further information.

IMDG / IMO Contact the preparer for further information.

15. REGULATORY INFORMATION

International Inventories

TSCA: United States Yes - All components are listed or exempt.
DSL: Canada Yes - All components are listed or exempt.

Federal Regulations

SARA 311/312 hazardous categorization

Serious eye damage or eye irritation
Respiratory or Skin Sensitization

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Component	CAS No.	Weight %	Sara 313 – Threshold Values %
Aluminum oxide	1344-28-1	45 - 55	1.0

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

None

US State Regulations

California Proposition 65

WARNING: This product can expose you to chemicals including Methanol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania
Aluminum oxide	X	X	X

Legend
X - Listed

16. OTHER INFORMATION

HMIS -

Health hazards:	2
Flammability:	1
Physical Hazards:	0
PPE:	-

HMIS Legend
0 - Minimal Hazard
1 - Slight Hazard
2 - Moderate Hazard
3 - Serious Hazard
4 - Severe Hazard
* - Chronic Hazard

X - Consult your supervisor or S.O.P. for "Special" handling instructions.
Note: The PPE rating has intentionally been left blank. Choose appropriate PPE that will protect employees from the hazards the material will present under the actual normal conditions of use.

Caution: HMISÒ ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMISÒ ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer, has chosen to provide them. HMISÒ ratings are to be used only in conjunction with a fully implemented HMISÒ program by workers who have received appropriate HMISÒ training. HMISÒ is a registered trade and service mark of the NPCA. HMISÒ materials may be purchased exclusively from J. J. Keller (800) 327-6868.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Revision Date:	30-Sep-2024
Revision Summary	Initial Release

Disclaimer
The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, provincial, and local laws and regulations.

END OF SAFETY DATA SHEET

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Revision Date: *30-Sept 2024* **Revision Number:** *1*

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	**SPARKLETUFF™ ANTI-SLIP CATALYST - PART B**
Product Class	CATALYST
Color	Clear
Recommended use	CATALYST
Restrictions on use	No information available.

Manufactured For
Safety Direct America
26705 Loma Verde
Mission Viejo, CA 92691
Phone:(949) 933-6971
www.safetydirectamerica.com

Emergency Telephone
(949) 933-6971 (Normal Business Hours)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1A
Flammable Liquid	Category 4

Label elements

Danger

Hazard statements
Harmful if swallowed

Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Combustible liquid

Appearance liquid

Odor little or no odor

Precautionary Statements - Prevention
Wash face, hands, and any exposed skin thoroughly after handling.
Do not eat, drink, or smoke when using this product.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wear protective gloves/clothing and eye/face protection.
Contaminated work clothing must not be allowed out of the workplace.
Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking

Precautionary Statements - Response
Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician
Skin
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
Inhalation
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Immediately call a POISON CENTER or doctor/physician.
Ingestion
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Rinse mouth.
Do NOT induce vomiting.
Fire
In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage
Store locked up.

Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

Other information
Reacts with water forming ethanol.

IMPORTANT: Designed to be mixed with other components. Mixture will have hazards of all components. Before opening packages, read all warning labels. Follow all precautions.

3. COMPOSITION INFORMATION ON COMPONENTS

Chemical name	CAS No	Weight-%
gamma-Aminopropyltriethoxysilane	919-30-2	90 ≤ 100

4. FIRST AID MEASURES

General Advice
Call a poison control center or doctor for treatment advice. Have the product containers or label with you when calling a poison control center or doctor or going for treatment.

Eye Contact
Immediate medical attention is required. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.

Skin Contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Continue to rinse for at least 10 minutes. In the case of skin irritation or allergic reactions see a physician. Wash contaminated clothing before reuse. Destroy contaminated articles such as shoes.

Inhalation
Move to fresh air. If symptoms persist, call a physician.
If not breathing, give artificial respiration. Call a physician immediately.

Ingestion
Rinse mouth with water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

Most Important Symptoms/Effects
Eye irritation. Skin irritation. May cause allergic skin reaction. Moderately toxic by swallowing. May cause acute kidney injury if swallowed or by sustained skin contact. Due to the severely irritating or corrosive nature of the material, swallowing may cause burning sensation and lead to ulceration and inflammation of the upper alimentary tract with hemorrhage and fluid loss. Also, perforation of the esophagus or stomach may occur, leading to mediastinitis or peritonitis and the resultant complications.

Notes To Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Do not use water jet as an extinguisher, as this will spread the fire.

Protective equipment and precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

Hazardous combustion products

Burning may result in carbon dioxide, carbon monoxide and other combustion products of varying composition which may be toxic and/or irritating.

Specific Hazards Arising from The Chemical

Combustible material. Closed containers may rupture if exposed to fire or extreme heat. Keep product and empty container away from heat and sources of ignition. Use water spray to keep fire-exposed containers cool.

Sensitivity to mechanical impact No

Sensitivity to static discharge Yes

Flash Point Data

Flash point (°F)	199
Flash Point (°C)	93
Method	PMCC

Flammability Limits In Air

Lower flammability limit:	No data available
Upper flammability limit:	No data available

NFPA Health: 2 **Flammability: 1** **Instability: 0** **Special:** Not Applicable

NFPA Legend
0 - Not Hazardous
1 - Slightly
2 - Moderate
3 - High
4 - Severe

The ratings assigned are only suggested ratings, the contractor/employer has ultimate responsibilities for NFPA ratings where this system is used.

Additional information regarding the NFPA rating system is available from the National Fire Protection Agency (NFPA) at www.nfpa.org.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Caution: Contaminated surfaces may be slippery.Keep people away from and upwind of spill/leak. Remove all sources of ignition. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and inhalation of vapors. Ensure adequate ventilation.
.**Other Information**	Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.
Environmental precautions	See Section 12 for additional Ecological Information.
Methods for Cleaning Up	Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Handling	Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist. Do not taste or swallow. Do not get in eyes, on skin, on clothing. Wear personal protective equipment. Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from open flames, hot surfaces, and sources of ignition.
Storage	Keep containers tightly closed in a dry, cool, and well-ventilated place. Keep away from heat. Keep away from open flames, hot surfaces, and sources of ignition. Keep in properly labeled containers. Use original container or packaging of similar material of construction. Empty containers retain product residue and can be hazardous. Do not reuse container. Keep out of the reach of children.
Incompatible Materials	Incompatible with strong acids and bases and strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

No exposure limits have been established for this product.

Engineering Measures	Provide eyewash station and safety shower Ensure adequate ventilation, especially in confined areas. Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal Protective Equipment

Eye/Face Protection	Tightly fitting safety goggles If splashes are likely to occur wear face-shield.
Skin Protection	Long sleeved clothing. Protective gloves

Respiratory Protection	In operations where exposure limits are exceeded, use a NIOSH approved respirator that has been selected by a technically qualified person for the specific work conditions. When spraying the product or applying in confined areas, wear a NIOSH approved respirator specified for paint spray or organic vapors.
Hygiene Measures	Avoid contact with skin, eyes, and clothing. Do not breathe vapors/dust. Remove and wash contaminated clothing before re-use. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink, or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	**colorless** liquid
Odor	amine like
Odor Threshold	No information available
Density (lbs./gal)	7.91
Specific Gravity	0.95
pH	No information available
Viscosity (cps)	No information available
Solubility(ies)	No information available
Water solubility	No information available
Evaporation Rate	No information available
Vapor pressure @20 °C	0.02 hPa (20 °C)
Relative vapor density	Heavier than air
Wt. % Solids	0 - 5
Vol. % Solids	No information available.
Wt. % Volatiles	95 - 100
Vol. % Volatiles	No information available.
VOC Regulatory Limit (g/L)	< 50
Boiling Point (°F)	428
Boiling Point (°C)	220
Freezing point (°F)	< -94
Freezing Point (°C)	< -70
Flash point (°F)	199
Flash Point (°C)	93
Method	PMCC
Flammability (solid, gas)	Not applicable
Upper flammability limit:	Not applicable
Lower flammability limit:	Not applicable
Autoignition Temperature (°F)	518 °F (1,010 hPa)
Autoignition Temperature (°C)	270 °C (1,010 hPa)
Decomposition Temperature (°F)	No information available
Decomposition Temperature (°C)	No information available
Partition coefficient	No information available

10. STABILITY AND REACTIVITY

Reactivity	Reacts with water.
Chemical Stability	Stable under normal conditions.
Conditions to avoid	Avoid contact with: Moisture. Heat, sparks, flames.

Incompatible Materials	Reaction with water or other aqueous media is rapid and exothermic. The addition of small amounts of water (in the range of 2-15%) can produce an exothermic reaction which generates alcohol to the extent that the resulting solution can reach a temperature which exceeds the flash point of the new solution. If a water solution is desired, add the product to water, and not vice versa.
Hazardous Decomposition Products	In case of fire, gives off (emits): Carbon oxides Oxides of silicon. Nitrogen Oxides Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant. Acute overexposure to the products of combustion may result in irritation of the respiratory tract.
Possibility of hazardous reactions	Reacts with water forming ethanol.

11. TOXICOLOGICAL INFORMATION

Product Information

Information on likely routes of exposure

Principal Routes of Exposure Eye contact, skin contact and inhalation.

Acute Toxicity

Product Information No information available

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Eye contact	Severely irritating to eyes. May cause burns. Risk of serious damage to eyes.
Skin contact	Contact **m**ay cause skin burns, skin irritation and/or dermatitis. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Repeated exposure may cause skin dryness or cracking. Sustained skin contact may be harmful.
Inhalation	Vapors may be irritating to the eyes, nose, throat, and lungs
Ingestion	Harmful if swallowed. Due to the severely irritating or corrosive nature of the material, swallowing may cause burning sensation in mouth, throat and stomach that can lead to ulceration and inflammation. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion may cause irritation to mucous membranes, mouth, throat and stomach.
Sensitization	May cause sensitization by skin contact.
Neurological Effects	No information available.
Mutagenic Effects	No information available.
Reproductive Effects	No information available.
Developmental Effects	No information available.
Target organ effects	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Other adverse effects	No information available.
Aspiration Hazard	No information available

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral)	503.63 mg/kg
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available

Chronic Toxicity

Carcinogenicity
There are no known carcinogenic chemicals in this product above reportable levels.

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects
The environmental impact of this product has not been fully investigated.

Product Information

Acute Toxicity to Fish
No information available

Acute Toxicity to Aquatic Invertebrates
No information available

Acute Toxicity to Aquatic Plants
No information available

Persistence / Degradability
No information available.

Bioaccumulation
No information available.

Mobility in Environmental Media
No information available.

Ozone
Not applicable

Component Information

Acute Toxicity to Fish
No information available

Acute Toxicity to Aquatic Invertebrates
No information available

Acute Toxicity to Aquatic Plants
No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of in accordance with federal, state, and local regulations. Local requirements may vary, consult your sanitation department or state-designated environmental protection agency for more disposal options.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (gamma-Aminopropyltriethoxysilane)
Transport hazard class(es)	8
UN-No	UN3267
Packing Group	II
Description	UN3267, CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (gamma-Aminopropyltriethoxysilane), 8, II

ICAO / IATA Contact supplier for further information.

IMDG / IMO Contact supplier for further information.

15. REGULATORY INFORMATION

International Inventories

TSCA: United States	Yes - All components are listed or exempt.
DSL: Canada	Yes - All components are listed or exempt.

Federal Regulations

SARA 311/312 Hazard Categories

Flammable (gases, aerosols, liquids, or solids)
Acute toxicity (any route of exposure)
Skin Corrosion or Irritation
Serious eye damage or eye irritation
Respiratory or Skin Sensitization
Hazards Not Otherwise Classified (HNOC)

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

None

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

None

US State Regulations

California Proposition 65

WARNING: This product can expose you to chemicals including Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania
gamma-Aminopropyltriethoxysilane		X	

Legend
X - Listed

16. OTHER INFORMATION

HMIS

Health hazards	3
Flammability	2
Physical hazards:	2
Personal protection	-

HMIS Legend
0 - Minimal Hazard
1 - Slight Hazard
2 - Moderate Hazard
3 - Serious Hazard
4 - Severe Hazard
* - Chronic Hazard
X - Consult your supervisor or S.O.P. for "Special" handling instructions.
Note: The PPE rating has intentionally been left blank. Choose appropriate PPE that will protect employees from the hazards the material will present under the actual normal conditions of use.

Caution: HMIS®ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS®ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer, has chosen to provide them. HMIS®ratings are to be used only in conjunction with a fully implemented HMIS®program by workers who have received appropriate HMIS®training. HMIS®is a registered trade and service mark of the NPCA. HMIS®materials may be purchased exclusively from J. J. Keller (800) 327-6868.

WARNING! If you scrape, sand, or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Revision Date:	30-Sept 2024
Revision Summary	Initial Release

Disclaimer

The information contained herein is presented in good faith and believed to be accurate as of the effective date shown above. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. Any use of this data and information must be determined by the user to be in accordance with applicable federal, provincial, and local laws and regulations.

End of Safety Data Sheet