

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name IdeaPaint CREATE CLEAR THAT (part A)
Version # 03
Issue date 08-29-2012
Revision date 09-13-2012
Supersedes date 08-29-2012
CAS # Mixture
Product code IdeaPaint CREATE CLEAR- THAT (part A)
Product use Dry erase coating.
Manufacturer/Supplier IdeaPaint
290 Eliot Street, 2nd Floor, Ashland, MA 01721
Telephone number 617.714.1050
Emergency +1.866.519.4752 (US, Canada, Mexico)
+1-760-476-3962 (US, Canada, Mexico)
Access Code: 333641

2. Hazards Identification

Physical state Liquid.
Appearance Transparent liquid
Emergency overview WARNING

May be harmful if swallowed. Irritating to eyes and skin. May cause allergic skin reaction.
This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

OSHA regulatory status

Potential health effects

Routes of exposure Inhalation. Ingestion. Skin contact. Eye contact.

Eyes Irritating to eyes.

Skin Irritating to skin.

Inhalation Prolonged inhalation may be harmful.

Ingestion Harmful if swallowed. Irritating to mouth, throat, and stomach.

Target organs Eyes. Skin.

Chronic effects Preparation contains an epoxy resin, which may cause sensitization and development of allergy.
Possible reproductive hazard - contains material that may cause adverse reproductive effects.
Danger of adverse health effects by prolonged exposure.

Signs and symptoms Skin irritation. Irritation of eyes and mucous membranes. Sensitization.

Potential environmental effects Toxic to aquatic organisms. May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Siloxanes and silicones, di-me, methoxy ph polymers with ph silsesquioxanes, methoxy-terminated	68957-04-0	40-70
Epoxy resin, MW <= 700	30583-72-3	10-30
Propylene carbonate	108-32-7	3-8
Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	41556-26-7	1-5
Dibutyltin di(acetate)	1067-33-0	1-5
Silicon dioxide	7631-86-9	0.3-<1
Ethanol	64-17-5	0.1-1
Ethylbenzene	100-41-4	0.1-1

Components	CAS #	Percent
Xylene	1330-20-7	0.1-1

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First Aid Measures

First aid procedures

- Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove any contact lenses and open eyelids wide apart. Get medical attention if irritation develops or persists.
- Skin contact** Remove contaminated clothes and rinse skin thoroughly with water for at least 15 minutes. Get medical attention if irritation develops or persists.
- Inhalation** If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.
- Ingestion** Have victim rinse mouth thoroughly with water. Do not induce vomiting without advice from poison control center. Do not use mouth-to-mouth method if victim ingested the substance.

Notes to physician Treat symptomatically.

General advice Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties The product is not flammable.

Extinguishing media

- Suitable extinguishing media** Carbon dioxide, regular foam, dry chemical, water spray, or water fog.
- Unsuitable extinguishing media** None known.

Protection of firefighters

- Specific hazards arising from the chemical** Fire or high temperatures create: Carbon oxides. Nitrogen oxides. Metal oxides.
- Protective equipment and precautions for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Move containers from fire area if you can do it without risk. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Specific methods Move container from fire area if it can be done without risk. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. Accidental Release Measures

Personal precautions Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering. Avoid inhalation of vapors and contact with skin and eyes. Wear protective clothing as described in Section 8 of this MSDS.

Environmental precautions Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Methods for cleaning up Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste.

Other information

Clean up in accordance with all applicable regulations. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

7. Handling and Storage**Handling**

Use Personal Protective Equipment recommended in section 8 of the MSDS. Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Persons with epoxy allergy should not work with this product. Avoid inhalation of vapors and contact with skin, eyes and clothing. Avoid release to the environment. Provide adequate ventilation. In case of inadequate ventilation, use respiratory protection. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not reuse this container. "Empty" containers retain product residue (liquid or vapor) and can be dangerous.

Storage

Store in accordance with local, regional, national, and international regulations. Store in tightly closed original container in a dry, cool and well-ventilated place. Protect from direct sunlight. Store away from incompatible materials. Keep away from food, drink and animal feeding stuffs. Do not store in unlabelled containers. Keep container tightly closed in a dry and well-ventilated place. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate container to avoid environmental contamination. Store at temperature below 49°C.

8. Exposure Controls / Personal Protection**Occupational exposure limits****US. ACGIH Threshold Limit Values**

Components	Type	Value
Dibutyltin di(acetate) (CAS 1067-33-0)	STEL	0.2 mg/m ³
	TWA	0.1 mg/m ³
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm
Xylene (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Dibutyltin di(acetate) (CAS 1067-33-0)	PEL	0.1 mg/m ³
Ethanol (CAS 64-17-5)	PEL	1900 mg/m ³ 1000 ppm
Ethylbenzene (CAS 100-41-4)	PEL	435 mg/m ³ 100 ppm
Xylene (CAS 1330-20-7)	PEL	435 mg/m ³ 100 ppm

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value
Silicon dioxide (CAS 7631-86-9)	TWA	0.8 mg/m ³ 20 mppcf

Engineering controls

Ensure adequate ventilation, especially in confined areas. Provide easy access to water supply and eye wash facilities.

Personal protective equipment**Eye / face protection**

Chemical goggles are recommended.

Skin protection

Wear protective gloves. Butyl rubber gloves are recommended. Wear suitable protective clothing.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. Do not eat, drink or smoke when using the product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Transparent liquid
Physical state	Liquid.
Form	Liquid.
Color	Clear.
Odor	Mild.
Odor threshold	Not available.
pH	Not available.
Vapor pressure	0.2 hPa (20°C/68°F)
Vapor density	Not available.
Boiling point	> 220 °F (> 104.4 °C)
Melting point/Freezing point	Not available.
Solubility (water)	Insoluble.
Specific gravity	9.5 lbs/gal
Flash point	> 190 °F (> 87.8 °C) Closed Cup
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	> 572 °F (> 300 °C)
VOC	< 25 g/l
Evaporation rate	32 BuAc
Partition coefficient (n-octanol/water)	Not available.

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Heat.
Incompatible materials	Water. Acids. Oxidizing material. Strong alkaline.
Hazardous decomposition products	None in particular.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
Dibutyltin di(acetate) (CAS 1067-33-0)		
Acute		
<i>Oral</i>		
LD50	Mouse	109.7 mg/kg
	Rat	32 mg/kg
Sensitization	May cause sensitization by skin contact.	
Acute effects	Harmful if swallowed. Irritating to eyes and skin.	
Local effects	Irritating to eyes and skin.	

US. ACGIH Threshold Limit Values

Dibutyltin di(acetate) (CAS 1067-33-0) Can be absorbed through the skin.

Chronic effects Preparation contains an epoxy resin, which may cause sensitization and development of allergy.

Carcinogenicity Hazardous by OSHA criteria. Hazardous by WHMIS criteria. Cancer hazard.

ACGIH Carcinogens

Dibutyltin di(acetate) (CAS 1067-33-0) A4 Not classifiable as a human carcinogen.

Ethanol (CAS 64-17-5)

A3 Confirmed animal carcinogen with unknown relevance to humans.

Ethylbenzene (CAS 100-41-4)

A3 Confirmed animal carcinogen with unknown relevance to humans.

Xylene (CAS 1330-20-7)

A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Ethylbenzene (CAS 100-41-4)

2B Possibly carcinogenic to humans.

Silicon dioxide (CAS 7631-86-9)

3 Not classifiable as to carcinogenicity to humans.

Xylene (CAS 1330-20-7)

3 Not classifiable as to carcinogenicity to humans.

US NTP Report on Carcinogens: Known carcinogen

Ethanol (CAS 64-17-5)

Known To Be Human Carcinogen.

Mutagenicity	No data available.
Reproductive effects	May damage fertility or the unborn child.
Symptoms and target organs	Skin irritation. Irritation of eyes and mucous membranes. Sensitization.
Further information	No other specific acute or chronic health impact noted.

12. Ecological Information

Ecotoxicity	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulation / Accumulation	Not available.
Partition coefficient	Not available.
Dibutyltin di(acetate)	1.27
Mobility in environmental media	Not available.

13. Disposal Considerations

Waste codes

US RCRA Hazardous Waste U List: Reference

Xylene (CAS 1330-20-7)

U239

Waste from residues / unused products	Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

DOT

Basic shipping requirements:

UN number	UN3082
Proper shipping name	Environmentally hazardous substances, liquid, n.o.s. (Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate, Dibutyltin di(acetate)), MARINE POLLUTANT
Hazard class	9
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Additional information:	
Special provisions	8, 146, 335, IB3, T4, TP1, TP29
Packaging exceptions	155
Packaging non bulk	203
Packaging bulk	241

IATA

UN number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate, Dibutyltin di(acetate))
Transport hazard class(es)	9
Packing group	III
Environmental hazards	Yes
ERG code	9L

IMDG

UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate, Dibutyltin di(acetate)), MARINE POLLUTANT
Transport hazard class(es)	9
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS No.	F-A, S-F
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

15. Regulatory Information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Ethylbenzene (CAS 100-41-4)

Xylene (CAS 1330-20-7)

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Ethylbenzene (CAS 100-41-4) 0.1 %

Xylene (CAS 1330-20-7) 1.0 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Ethylbenzene (CAS 100-41-4) Listed.

Xylene (CAS 1330-20-7) Listed.

CERCLA (Superfund) reportable quantity

Ethanol: 100

Ethylbenzene: 1000

Xylene: 100

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance (40 CFR 355, Appendix A) No

Section 311/312 (40 CFR 370) Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No

Country(s) or region	Inventory name	On inventory (yes/no)*
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

State regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Hazardous Substances (Director's): Listed substance

Dibutyltin di(acetate) (CAS 1067-33-0)	Listed.
Ethanol (CAS 64-17-5)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Silicon dioxide (CAS 7631-86-9)	Listed.
Xylene (CAS 1330-20-7)	Listed.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Ethanol (CAS 64-17-5)	Listed: April 29, 2011 Carcinogenic. Listed: July 1, 1988 Carcinogenic.
Ethylbenzene (CAS 100-41-4)	Listed: June 11, 2004 Carcinogenic.

US - New Jersey RTK - Substances: Listed substance

Ethanol (CAS 64-17-5)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Silicon dioxide (CAS 7631-86-9)	Listed.
Xylene (CAS 1330-20-7)	Listed.

US. Massachusetts RTK - Substance List

Dibutyltin di(acetate) (CAS 1067-33-0)	Listed.
Ethanol (CAS 64-17-5)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Silicon dioxide (CAS 7631-86-9)	Listed.
Xylene (CAS 1330-20-7)	Listed.

US. New Jersey Worker and Community Right-to-Know Act

Ethylbenzene (CAS 100-41-4)	500 LBS
Xylene (CAS 1330-20-7)	500 LBS

US. Pennsylvania RTK - Hazardous Substances

Ethanol (CAS 64-17-5)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Silicon dioxide (CAS 7631-86-9)	Listed.
Xylene (CAS 1330-20-7)	Listed.

16. Other Information

Further information	HMIS® is a registered trade and service mark of the NPCA.
HMIS® ratings	Health: 2* Flammability: 2
NFPA ratings	Health: 2 Flammability: 2 Instability:
Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name IdeaPaint CREATE CLEAR THIS (part B)
Version # 02
Issue date 08-29-2012
Revision date 09-13-2012
Supersedes date 08-29-2012
CAS # Mixture
Product use Dry erase coating - Part B.
Manufacturer/Supplier IdeaPaint
290 Eliot Street, 2nd Floor, Ashland, MA 01721
Telephone number 617.714.1050
Emergency +1.866.519.4752 (US, Canada, Mexico)
+1-760-476-3962 (US, Canada, Mexico)
Access Code: 333641

2. Hazards Identification

Physical state Liquid.
Appearance Colorless to yellowish liquid.
Emergency overview DANGER! Causes skin, eye and digestive tract burns. Causes respiratory tract irritation.
OSHA regulatory status This product is hazardous according to OSHA 29 CFR 1910.1200.
Potential health effects
Routes of exposure Eyes. Skin. Inhalation. Ingestion.
Eyes Causes eye burns.
Skin Causes skin burns.
Inhalation Causes respiratory tract irritation.
Ingestion Causes digestive tract burns.
Target organs Eyes. Skin. Respiratory system. Digestive tract.
Chronic effects None known.
Signs and symptoms Contact with this material will cause burns to the skin, eyes and mucous membranes.
Potential environmental effects The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
3-Aminopropyltriethoxysilane	919-30-2	99

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First Aid Measures

First aid procedures

Eye contact Immediately flush with plenty of water for at least 15 minutes occasionally lifting upper and lower eyelids. If easy to do, remove contact lenses. Call a physician or poison control center immediately. Get medical attention if symptoms persist.

Skin contact Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Inhalation Move injured person into fresh air and keep person calm under observation. Get medical attention.

Ingestion

Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Obtain medical attention and take along this material safety data sheet.

Notes to physician

Treat symptomatically.

5. Fire Fighting Measures**Flammable properties**

No unusual fire or explosion hazards noted.

Extinguishing media**Suitable extinguishing media**

Carbon dioxide, regular foam, dry chemical, water spray, or water fog.

Unsuitable extinguishing media

None known.

Protection of firefighters**Specific hazards arising from the chemical**

During fire, gases hazardous to health may be formed.

Protective equipment and precautions for firefighters

Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

Hazardous combustion products

Nitrogen oxides.

6. Accidental Release Measures**Personal precautions**

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate the area. Avoid any exposure. Wear suitable protective clothing. See Section 8 of the MSDS for Personal Protective Equipment.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground unless authorized by permit.

Methods for cleaning up

Flush spill area with water spray. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

7. Handling and Storage**Handling**

Do not breathe mist or vapor. Do not get in eyes, on skin, on clothing. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling. Wear approved safety goggles. Wear protective gloves and appropriate clothing to prevent skin contact. Observe good industrial hygiene practices.

Storage

Store in closed original container in a dry place. Store away from incompatible materials.

8. Exposure Controls / Personal Protection**Engineering controls**

Provide adequate ventilation and minimize the risk of inhalation of vapors. Eye wash facilities and emergency shower must be available when handling this product.

Personal protective equipment**Eye / face protection**

Wear approved safety goggles.

Skin protection

Wear appropriate chemical resistant gloves. Butyl rubber gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. PVC gloves are recommended. Wear appropriate chemical resistant clothing to prevent any possibility of skin contact.

Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical & Chemical Properties

Appearance	Colorless to yellowish liquid.
Physical state	Liquid.
Form	Liquid.
Color	Colorless to yellowish.
Odor	Amine-like.
Odor threshold	Not available.
pH	11.3 at 20 °C
Vapor pressure	0.02 hPa at 20 °C
Vapor density	Not available.
Boiling point	428 °F (220 °C)
Melting point/Freezing point	< -94 °F (< -70 °C)
Solubility (water)	5.4 g/l at 20°C
Specific gravity	7.88 lbs/gal
Flash point	199 °F (92.8 °C)
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	572 °F (300 °C)
VOC	< 100 g/l
Viscosity	2 mPa·s DIN 53015 at 20 °C
Partition coefficient (n-octanol/water)	No data available. 1.7 QSAR-method (20 °C)
Molecular weight	221.42 g/mol
Molecular formula	C9-H23-N-O3-Si
Other data	
Explosive limit - lower (%)	0.8 %
Explosive limit - upper (%)	4.5 %
Flammability	not determined

10. Chemical Stability & Reactivity Information

Chemical stability	Stable under normal temperature conditions.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources.
Incompatible materials	Strong oxidizing agents. Acids.
Hazardous decomposition products	At elevated temperatures: Carbon monoxide. Carbon dioxide (CO2). Nitrogen Oxides. Ethanol in case of hydrolysis.
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Sensitization	No sensitizing effects known.
Acute effects	Causes skin, eye and digestive tract burns.
Local effects	Causes skin, eye and digestive tract burns. Causes respiratory tract irritation.
Chronic effects	None known.
Carcinogenicity	No data available.
Mutagenicity	No data available.
Reproductive effects	No data available.
Symptoms and target organs	Inhalation: May cause damage to mucous membranes in nose, throat, lungs and bronchial system. Eye contact: Prolonged contact causes serious eye and tissue damage. Skin contact: May cause serious chemical burns to the skin. Ingestion: May cause burns in mucous membranes, throat, esophagus and stomach.

12. Ecological Information

Ecotoxicity	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
Persistence and degradability	No data available.
Bioaccumulation / Accumulation	No data available.
Partition coefficient 1.7 QSAR-method, (20 °C)	No data available.
Mobility in environmental media	Not available.

13. Disposal Considerations

Waste codes	D002: Corrosive waste
Disposal instructions	Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

DOT

Basic shipping requirements:

UN number	UN3267
Proper shipping name	Corrosive liquid, basic, organic, n.o.s. (3-Aminopropyltriethoxysilane)
Hazard class	8
Subsidiary hazard class	-
Packing group	II
Environmental hazards	
Marine pollutant	No
Additional information:	
Special provisions	B2, IB2, T11, TP2, TP27
Packaging exceptions	154
Packaging non bulk	202
Packaging bulk	242

IATA

UN number	UN3267
UN proper shipping name	Corrosive liquid, basic, organic, n.o.s. (3-Aminopropyltriethoxysilane)
Transport hazard class(es)	8
Subsidiary class(es)	-
Packing group	II
Environmental hazards	No
ERG code	8L

IMDG

UN number	UN3267
UN proper shipping name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (3-Aminopropyltriethoxysilane)
Transport hazard class(es)	8
Subsidiary class(es)	-
Packing group	II
Environmental hazards	
Marine pollutant	No
EmS No.	F-A, S-B

15. Regulatory Information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.
-------------------------------	---

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance (40 CFR 355, Appendix A)
No

Section 311/312 (40 CFR 370)
Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania RTK - Hazardous Substances

Not regulated.

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings
Health: 3
Flammability: 2
Physical hazard: 0

NFPA ratings
Health: 3
Flammability: 2
Instability: 0

Disclaimer The information in the sheet was written based on the best knowledge and experience currently available.