MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	**IdeaPaint CREATE (clear version) part A (THAT)**
Revision date	03-15-2012
Version #	01
CAS #	Mixture
Product code	IdeaPaint CREATE (clear version) - THAT (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.
OSHA regulatory status	This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
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
Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	41556-26-7	1-5
Dibutyltin di(acetate)	1067-33-0	1-5
Ethanol	64-17-5	0.1-1
Ethylbenzene	100-41-4	0.1-1
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.

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) (1067-33-0)	STEL	0.2 mg/m3
	TWA	0.1 mg/m3
Ethanol (64-17-5)	STEL	1000 ppm
Ethylbenzene (100-41-4)	TWA	20 ppm
Xylene (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) (1067-33-0)	PEL	0.1 mg/m3
Ethanol (64-17-5)	PEL	1900 mg/m3 1000 ppm
Ethylbenzene (100-41-4)	PEL	435 mg/m3 100 ppm
Xylene (1330-20-7)	PEL	435 mg/m3 100 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Dibutyltin di(acetate) (1067-33-0)	STEL	0.2 mg/m3
	TWA	0.1 mg/m3
Ethanol (64-17-5)	TWA	1880 mg/m3 1000 ppm
Ethylbenzene (100-41-4)	STEL	543 mg/m3 125 ppm
	TWA	434 mg/m3 100 ppm
Xylene (1330-20-7)	STEL	651 mg/m3 150 ppm
	TWA	434 mg/m3 100 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Dibutyltin di(acetate) (1067-33-0)	STEL	0.2 mg/m3
	TWA	0.1 mg/m3
Ethanol (64-17-5)	STEL	1000 ppm
Ethylbenzene (100-41-4)	STEL	125 ppm
	TWA	100 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Xylene (1330-20-7)	STEL	150 ppm
	TWA	100 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Dibutyltin di(acetate) (1067-33-0)	TWA	0.1 mg/m3
Ethanol (64-17-5)	TWA	1900 mg/m3
		1000 ppm
Ethylbenzene (100-41-4)	STEL	125 ppm
	TWA	100 ppm
Xylene (1330-20-7)	STEL	150 ppm
	TWA	100 ppm

Canada. Quebec OELS. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
Dibutyltin di(acetate) (1067-33-0)	STEL	0.2 mg/m3
	TWA	0.1 mg/m3
Ethanol (64-17-5)	TWA	1880 mg/m3
		1000 ppm
Ethylbenzene (100-41-4)	STEL	543 mg/m3
		125 ppm
	TWA	434 mg/m3
		100 ppm
Xylene (1330-20-7)	STEL	651 mg/m3
		150 ppm
	TWA	434 mg/m3
		100 ppm

Mexico. Occupational Exposure Limit Values

Components	Type	Value
Dibutyltin di(acetate) (1067-33-0)	STEL	0.2 mg/m3
	TWA	0.1 mg/m3
Ethanol (64-17-5)	TWA	1900 mg/m3
		1000 ppm
Ethylbenzene (100-41-4)	STEL	545 mg/m3
		125 ppm
	TWA	435 mg/m3
		100 ppm
Xylene (1330-20-7)	STEL	655 mg/m3
		150 ppm
	TWA	435 mg/m3
		100 ppm

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

Color Clear.

Odor	Mild.
Odor threshold	Not available.
Physical state	Liquid.
Form	Liquid.
pH	Not available.
Melting point	Not available.
Freezing point	Not available.
Boiling point	> 100 °F (> 37.8 °C)
Flash point	> 190 °F (> 87.8 °C) Closed Cup
Evaporation rate	32 BuAc
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	0.54 kPa (20°C/68°F)
Vapor density	Not available.
Specific gravity	1.29 (20°C/68°F)
Solubility (water)	Insoluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	78.7 g/l

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	**Test Results**
Dibutyltin di(acetate) (1067-33-0)	Acute Oral LD50 Mouse: 109.7 mg/kg
	Acute Oral LD50 Rat: 32 mg/kg

Acute effects Harmful if swallowed. Irritating to eyes and skin.

Local effects Irritating to eyes and skin.

US ACGIH Threshold Limit Values: Skin designation

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

Sensitization May cause sensitization by skin contact.

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.
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 (n-octanol/water)	Not available.
Mobility in environmental media	Not available.

13. Disposal Considerations

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))
Hazard class Packing group Environmental hazards	9 III
Marine pollutant Labels required Additional information:	Yes 9
Special provisions	8, 146, 335, IB3, T4, TP1, TP29
Packaging exceptions	155
Packaging non bulk	203
Packaging bulk	241

IATA

Basic shipping requirements:

UN number	UN3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate, Dibutyltin di(acetate))
Hazard class Packing group Environmental hazards	9 III
Marine pollutant Additional information:	Yes
ERG code	9L

IMDG

Basic shipping requirements:

UN number	UN3082

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate, Dibutyltin di(acetate))
Hazard class Packing group Environmental hazards	9 III
Marine pollutant	Yes
EmS No.	F-A, S-F

TDG

Basic shipping requirements:

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate, Dibutyltin di(acetate))
Hazard class UN number Packing group Marine pollutant	9 UN3082 III Yes
Additional information:	
Special provisions	16

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.

US CAA Section 112 Hazardous Air Pollutants (HAPs) List

ETHYLBENZENE (CAS 100-41-4)
M-XYLENES (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 (lbs) (40 CFR 302.4)

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 CRF 355, Appendix A)	No
Section 311/312 (40 CFR 370)	No
Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)	Not controlled
Canadian regulations	This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.
WHMIS status	Controlled
WHMIS classification	B3 - Flammable/Combustible D2A - Other Toxic Effects-VERY TOXIC D2B - Other Toxic Effects-TOXIC

WHMIS labeling

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)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
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 that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations WARNING: This product contains chemicals 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.
Xylene (CAS 1330-20-7)	Listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Ethylbenzene (CAS 100-41-4)	Listed.

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

Ethylbenzene (CAS 100-41-4)	Listed: June 11, 2004 Carcinogenic.

US - Massachusetts RTK - Substance: Listed substance

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

US - New Jersey Community RTK (EHS Survey): Reportable threshold

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

US - New Jersey RTK - Substances: Listed substance

Ethanol (CAS 64-17-5)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Xylene (CAS 1330-20-7)	Listed.

US - Pennsylvania RTK - Hazardous Substances: Listed substance

Ethanol (CAS 64-17-5)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Xylene (CAS 1330-20-7)	Listed.

Mexico regulations This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000).

16. Other Information

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

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

NFPA ratings
Health: 2
Flammability: 2
Instability: 0

Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.
Issue date	03-15-2012

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	**IdeaPaint CREATE (clear version) part B (THIS)**
Version #	01
Revision date	03-16-2012
CAS #	Mixture
Product code	IdeaPaint CREATE (clear version) - THIS (B)
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 Irritating to eyes and skin.
OSHA regulatory status	This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
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	Irritating to mouth, throat, and stomach.
Target organs	Eyes. Respiratory system. Skin.
Chronic effects	Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Signs and symptoms	Skin irritation. Irritation of eyes and mucous membranes.
Potential environmental effects	Toxic to aquatic organisms. May cause long-term adverse effects in the environment.

3. Composition / Information on Ingredients

Components	CAS #	Percent
n-[3-(Trimethoxysilyl)propyl]butylamine	31024-56-3	35-90
n-(3-(Trimethoxysilyl)propyl)ethylenediamine	1760-24-3	15-40
Dibutyltin dilaurate	77-58-7	0.5-<5.0

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	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Have victim rinse mouth thoroughly with water. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
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.
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 and sealed until ready for use. 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 dilaurate (77-58-7)	STEL	0.2 mg/m3
	TWA	0.1 mg/m3

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

Components	Type	Value
Dibutyltin dilaurate (77-58-7)	PEL	0.1 mg/m3

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
Color	Clear.
Odor	Slight ammonia.
Odor threshold	Not available.
Physical state	Liquid.
Form	Liquid.
pH	Not available.
Melting point	Not available.
Freezing point	Not available.
Boiling point	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	Not available.
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.

Decomposition temperature	Not available.
VOC	254.6 g/l

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Keep away from heat, sparks, and flame.
Incompatible materials	Peroxides. Oxidizing agents. Acids. Alcohols. Reducing agents. Bases.
Hazardous decomposition products	None expected under normal conditions of use.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Acute effects	Irritating to eyes and skin. Material generates methanol on contact with water or moisture in eye, skin and mucous membranes and has an irritating dehydrating effect on overexposed tissue.
Local effects	Harmful if swallowed. Components of the product may be absorbed into the body through the skin. Contact may irritate or burn eyes. May cause sensitization by skin contact.

US ACGIH Threshold Limit Values: Skin designation

Dibutyltin dilaurate (CAS 77-58-7)	Can be absorbed through the skin.

Sensitization	May cause sensitization by skin contact.
Chronic effects	Prolonged exposure may cause chronic effects.
Carcinogenicity	No data available.

ACGIH Carcinogens

Dibutyltin dilaurate (CAS 77-58-7)	A4 Not classifiable as a human carcinogen.

Mutagenicity	No data available.
Symptoms and target organs	Skin irritation. Irritation of eyes and mucous membranes.

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.
Mobility in environmental media	Not available.
Partition coefficient (n-octanol/water)	Not available.

13. Disposal Considerations

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. (Dibutyltin dilaurate)
Hazard class Packing group Environmental hazards	9 III
Marine pollutant Labels required Additional information:	Yes 9
Special provisions	8, 146, 335, IB3, T4, TP1, TP29

Packaging exceptions	155
Packaging non bulk	203
Packaging bulk	241

IATA

Basic shipping requirements:

UN number	UN3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Dibutyltin dilaurate)
Hazard class Packing group Environmental hazards	9 III
Marine pollutant	Yes
Additional information:	
ERG code	9L

IMDG

Basic shipping requirements:

UN number	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dibutyltin dilaurate)
Hazard class Packing group Environmental hazards	9 III
Marine pollutant	Yes
EmS No.	F-A, S-F

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.

CERCLA/SARA Hazardous Substances - Not applicable.

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

Not regulated.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
Section 302 extremely hazardous substance (40 CRF 355, Appendix A)	No
Section 311/312 (40 CFR 370)	No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
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)	No
Korea	Existing Chemicals List (ECL)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
New Zealand	New Zealand Inventory	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 that all components of this product comply 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 - California Hazardous Substances (Director's): Listed substance

Dibutyltin dilaurate (CAS 77-58-7)	Listed.

16. Other Information

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

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

NFPA ratings
Health: 2
Flammability: 0
Instability: 0

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

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