LC-033-LINDRIDE 66

Revision Date 24-Aug-2020

SAFETY DATA SHEET



Issue Date 15-May-2002

Revision Date 24-August-2020

Version 3

1. PRODUCT AND COMPANY IDENTIFICATION

Product	Identifier
Product	Name

LINDRIDE 66 (All Types)

LC-033

Other Means of Identification SDS

 Recommended Use of the Chemical and Restrictions on Use

 Recommended Use
 Epoxy curing agent for high performance composites and electronics

Details of the Supplier of the Safety Data Sheet

Supplier Address Lindau Chemicals, Inc. 731 Rosewood Drive Columbia, SC 29201

Emergency Telephone Number

Company Phone Number

Emergency Telephone

Phone: 1-803-799-6863 Fax: 1-803-256-3639 INFOTRAC 01-352-323-3500 (International) 1-800-457-4280 (North America)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: The information below relates to repeated and prolonged exposure, particularly where exposure is to the vapor form of the substance. The supplier has indicated that eye exposure normally results in eye irritation.

Classification

Serious Eye Damage/Eye Irritation	Category 1
Respiratory Sensitization	Category 1
Skin Sensitization	Category 1

Signal Word

Danger

Hazard Statements

H318: Causes serious eye damage

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled

H317: May cause an allergic skin reaction



Appearance Amber liquid

Physical State Liquid

Odor Characteristic

Precautionary Statements - Prevention

P261: Avoid breathing fumes or vapors.

P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves, protective clothing and eye protection.

P284: In case of inadequate ventilation wear respiratory protection.

Precautionary Statements - Response

P305 + P351: IF IN EYES: Rinse cautiously with water for several minutes. P338: Remove contact lenses, if present and easy to do. Continue rinsing. P310: Immediately call a POISON CENTER or doctor/physician.

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.

P362 + P364: Take off contaminated clothing and wash it before reuse.

P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P342 + P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Precautionary Statements - Disposal

P501: Dispose of contents/container to an approved waste disposal plant.

Hazards Not Otherwise Classified (HNOC)

Causes mild skin irritation

Other Hazards

Harmful to aquatic life with long lasting effects Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Methylhexahydrophthalic anhydride	19438-60-9	45–80
Methyltetrahydrophthalic anhydride	34090-76-1	10–45
Benzyltriethylammonium chloride	56-37-1	< 10

** If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST AID MEASURES

First Aid Measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get immediate medical advice/attention.
Ingestion	Call immediately a physician or your local Poison Control Center.
Skin Contact	Wash with soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

Most Important Symptoms and Effects. both Acute and Delayed

SymptomsContact may cause irritation and redness. Direct eye contact may cause stinging, tearing
and redness. May cause irritation to the mucous membranes and upper respiratory tract.

Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Media Dry chemical, carbon dioxide (CO₂), water spray (fog)

Unsuitable Media Not determined

Specific Hazards Arising from the Chemical

Burning may produce irritating vapors, carbon monoxide and/or carbon dioxide.

Hazardous Combustion Products Carbon monoxide, carbon dioxide

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.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions. Protective Equipment and Emergency Procedures

Personal Precautions	Use personal protective equipment as required. Remove all sources of ignition. Ensure adequate ventilation.	
Environmental Precautions	Avoid subsoil penetration. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.	
Methods and Material for Containment and Cleaning Up		
Methods for Containment	Provide ventilation and respirator if needed. Flush area with water/soda ash. Keep flames away. Avoid subsoil penetration. Do not let product enter drains or contaminate surface water.	
Methods for Cleaning Up	Absorb spillage with non-combustible, absorbent material. Dispose of in accordance with federal, state and local regulations. Flush area with water and soda ash.	

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling	Use only in well-ventilated areas. Use personal protection recommended in Section 8.	
	Avoid breathing vapors. Do not take contaminated clothing out of the workplace	

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store at temperatures above 50°F (10°C) to prevent crystallization.	
Packaging Materials	Do not transfer to unmarked containers.	
Incompatible Materials	Alcohols, alkalis, water	

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection	Wear approved safety goggles.	
Skin and Body Protection	Wear chemical resistant, impermeable gloves. Wear suitable protective clothing.	
Respiratory Protection	espiratory Protection Ensure adequate ventilation, especially in confined areas.	
General Hygiene	Handle in accordance with good industrial hygiene and safety practice.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State Appearance Color	Liquid Amber liquid Amber	Odor Odor Threshold	Characteristic Not determined
<u>Property</u> pH Melting Point/Freezing Point	<u>Values</u> Not determined Not determined	Remarks/Method	
Boiling Point/Boiling Range Flash Point	> 307 °C / > 585 °F > 135 °C / > 275 °F	ASTM D-86 (PM)	
Evaporation Rate Flammability (Solid, Gas) Upper Flammability Limit	zero n/a-liquid Not applicable	(butyl acetate = 1)	
Lower Flammability Limit Vapor Pressure Vapor Density	Not applicable Negligible 5.7	@ 15 °C	
Specific Gravity Water Solubility	1.17 Negligible	(air = 1) (water = 1) @ 25 °C	
Solubility in Other Solvents Partition Coefficient Autoignition Temperature	Not determined Not determined Not determined		
Decomposition Temperature Kinematic Viscosity Dynamic Viscosity Explosive Properties Oxidizing Properties Additional Information	Not determined Not determined Not determined Not determined Not determined Volatile by volume 0%		

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions

Chemical Stability

Stable under recommended storage conditions

Possibility of Hazardous Reactions

None under normal processing

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Slowly hydrolyzed by water. Reacts with incompatible materials.

Incompatible Materials

Alcohols, alkalis, water

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Inhalation	Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Eye Contact	Causes serious eye damage
Ingestion	May cause burns of the mouth, throat and gastrointestinal tract. Normal handling and hygiene precautions should always be taken to avoid ingestion
Skin Contact	May cause mild skin irritation. May cause allergic skin reaction.

Component Information

Chemical Name	Oral LD50	Dermal LD50
Methyltetrahydrophthalic anhydride 34090-76-1	2140 mg/kg (Rat)	
Benzyltriethylammonium chloride 56-37-1	> 2000 mg/kg (Rat)	> 2000 mg/kg (Rat)

Information on Physical. Chemical and Toxicological Effects

Symptoms Please see Section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short-term and Long-term Exposure

Sensitization	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Carcinogenicity	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life. Harmful to aquatic life with long-lasting effects.

Chemical Name	Fish LC50
Benzyltriethylammonium chloride	Pimephales promelas
56-37-1	141–185 mg/L 96 h (flow-through)

Persistence and Degradability

Not determined

Bioaccumulation

Not determined

<u>Mobility</u>

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS				
Waste Treatment Methods				
Disposal of Wastes	Dispose of in accordance with federal, state and local regulations. Incinerate in a suitable furnace or bury with lime in an approved landfill.			
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.			
14. TRANSPORT INFORMATION				
Regulatory Entity				
DOT	Not regulated			
ΙΑΤΑ	Not regulated			
IMDG	Not regulated			
•• ·				

Note

Please see current shipping paper for most up-to-date shipping information, including exemptions and special circumstances.

15. REGULATORY INFORMATION

International Inventories

Components Listed TSCA, DSL/NDSL, EINECS/ELINCS, ENCS, IECSC, KECI, PICCS, TCSI, AICS, NZIoC

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

- DSL/NDSL Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS Japan Existing and New Chemical Substances
- IECSC China Inventory of Existing Chemical Substances
- KECI Korea Existing Chemicals Inventory
- PICCS Philippines Inventory of Chemicals and Chemical Substances
- TCSI Taiwan Chemical Substance Inventory
- AICS Australian Inventory of Chemical Substances
- NZIOC New Zealand Inventory of Chemicals

United States Federal Regulations

CERCLA	This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) of the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).		
EPCRA	This product does not contain any chemicals with known CAS numbers that are subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-know Act of 1986 (40 CFR 372).		
Inited States State Pequilat	lions		

United States State Regulations

California Proposition 65 This product does not contain any Proposition 65 chemicals.

United States State Right-to-Know Regulations

Chemical Name Benzyltriethylammonium chloride 56-37-1		New Jersey X		Pennsylvania X		
						16. OTHER INFORMATION
IFPA	Health Hazards Not determined	Flammability Not determined	Instability Not determined	Special Hazards Not determined		
<u>IMIS</u>	Health Hazards	Flammability	Physical Hazards 0	Personal Protection Not determined		

Issue Date	15-May-2002
Revision Date	24-August-2020
Revision Note	Reviewed/updated
GHS Version	3

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet