



# SAFETY DATA SHEET

Issue Date 01-May-2000

Revision Date 01-September-2020

Version 3

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

Product Name LINDAX-1

### Other Means of Identification

SDS # LC-056

### Recommended Use of the Chemical and Restrictions on Use

Recommended Use Catalytic curing agent for epoxy resins

### 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

Phone: 1-803-799-6863

Fax: 1-803-256-3639

#### Emergency Telephone

INFOTRAC 01-352-323-3500 (International)

1-800-457-4280 (North America)

## 2. HAZARDS IDENTIFICATION

### Classification

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A
Specific Target Organ Toxicity (Single Exposure)	Category 3 (respiratory tract irritation)

### Signal Word

#### Warning

### Hazard Statements

H315: Causes skin irritation

H319: Causes serious eye irritation

H335: May cause respiratory irritation



**Appearance** Dark brown liquid

**Physical State** Liquid

**Odor** Slight characteristic odor

#### **Precautionary Statements - Prevention**

P261: Avoid breathing fumes or vapors.

P264: Wash face, hands and any exposed skin thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves, protective clothing and eye 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.

P337 + P313: If eye irritation persists: Get medical advice/attention.

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

P332 + P313: If skin irritation 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.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

#### **Precautionary Statements - Storage**

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

#### **Precautionary Statements - Disposal**

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

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### **Synonyms**

Alpha-methyl-1H-imidazole-1-ethanol; 1H-Imidazole-1-(2-propanol)

#### **Formula**

C<sub>6</sub>H<sub>10</sub>N<sub>2</sub>O

Chemical Name	CAS No	Weight-%
1-(2-Hydroxypropyl) imidazole	37788-55-9	100

### 4. FIRST AID MEASURES

#### **First Aid Measures**

##### **Inhalation**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

##### **Eye Contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If eye irritation persists: Get medical advice/attention.

##### **Ingestion**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

##### **Skin Contact**

If on skin, wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Remove and wash contaminated clothing before reuse.

#### **Most Important Symptoms and Effects**

##### **Symptoms**

Causes skin and eye irritation. May irritate respiratory system.

**Indication of any Immediate Medical Attention and Special Treatment Needed (if Necessary)**

**Note to Physician** Treat symptomatically.

**See Toxicological Information (Section 11)**

**5. FIRE-FIGHTING MEASURES****Extinguishing Media**

**Suitable Media** Use CO<sub>2</sub>, alcohol-resistant foam, dry chemical or water spray (fog).

**Unsuitable Media** Not determined

**Specific Hazards Arising from the Chemical**

Product may support combustion if exposed to fire. Combustion products may be toxic.

**Hazardous Combustion Products** Carbon monoxide, carbon dioxide, nitrogen oxides, ammonia

**Special Protective Equipment for Fire-fighters**

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** Wear protective clothing as described in Section 8 of this safety data sheet. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Provide adequate ventilation.

**Environmental Precautions** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13, Disposal Considerations, for additional information.

**Methods and Materials for Containment and Cleaning Up**

Contain spill, isolate the hazard area and provide ventilation. Absorb into inert material and shovel into suitable containers. Dispose of in accordance with federal, state and local regulations.

**7. HANDLING AND STORAGE****Precautions for Safe Handling**

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.

**General Hygiene** 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. See also Section 8 for additional information on hygiene measures.

**Conditions for Safe Storage (Including any Incompatibilities)**

**Storage Conditions** Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Avoid excessive temperatures and humidity.

**Incompatible Materials** Strong oxidizing agents, acids, acid chlorides

## 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.

### Control Parameters

**Engineering Controls**                      Ensure adequate ventilation, especially in confined areas. Use mechanical ventilation. Local exhaust is required. Eyewash stations. Showers.

### Individual Protection Measures

**Eye/Face Protection**                      Safety glasses with side shields or chemical splash goggles.

**Skin and Body Protection**                      Rubber, neoprene or other impervious gloves are recommended to prevent skin contact.

**Respiratory Protection**                      Ensure adequate ventilation, especially in confined areas. If natural ventilation is inadequate, local exhaust ventilation may be necessary.

**General Hygiene**                              Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

<b>Physical State</b>	Liquid	<b>Odor</b>	Slight characteristic odor
<b>Appearance</b>	Dark brown liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Dark brown		

<u>Property</u>	<u>Values</u>	<u>Remarks/Method</u>
pH	Not determined	
Melting Point	Not determined	
Boiling Point/Condensation point	> 300 °C (> 572 °F)	(ASTM D-86)
Flash Point	> 135 °C (> 275 °F)	(Tag closed cup)
Evaporation Rate	nil	(n-butyl acetate = 1)
Flammability (Solid, Gas)	Not applicable	
Upper Flammability Limit	Not applicable	
Lower Flammability Limit	Not applicable	
Vapor Pressure	< 1 mm Hg	@ 15 °C (59 °F)
Relative Vapor Density	4	(air = 1)
Specific Gravity	1.1	(water = 1) @ 25 °C (77 °F)
Water Solubility	Soluble	
Solubility in Other Solvents	Not determined	
Partition Coefficient (n-Octanol/Water)	0.0336	@ 25 °C (77 °F)
Auto-ignition Temperature	No data available	
Decomposition Temperature	No data available	
Kinematic Viscosity	No data available	
Dynamic Viscosity	No data available	
Explosive Properties	None	
Percent Volatile (By Volume%)	nil	

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical Stability

Stable under recommended storage conditions

### Possibility of Hazardous Reactions

No data available

**Hazardous Polymerization**      Hazardous polymerization does not occur.

### Conditions to Avoid

Excessively high temperatures

### Incompatible materials

Strong oxidizing agents, acids, acid chlorides

### Hazardous Decomposition Products

Carbon monoxide, carbon dioxide, nitrogen oxides, ammonia

## 11. TOXICOLOGICAL INFORMATION

### Information on Likely Routes of Exposure

**Inhalation**      Inhalation may cause respiratory irritation.

**Eye Contact**      Causes serious eye irritation

**Ingestion**      May be harmful if swallowed

**Skin Contact**      Causes mild skin irritation

### Information on Acute Toxicological Effects

Chemical Name	Oral LD50	Dermal LD50
1-(2-Hydroxypropyl) imidazole 37788-55-9	70.5 g/kg ( Rat )	> 10 g/kg ( Rabbit ) Primary irritation score: 2.25 ( Rabbit )

### Information on Physical, Chemical and Toxicological Effects

**Symptoms**      Please see Section 4 of this SDS for symptoms.

### Delayed and Immediate Effects and also Chronic Effects from Short-term and Long-term Exposure

**Carcinogenicity**      This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC, ACGIH or NTP.

### Numerical Measures of Toxicity

Not determined

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

The product is 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.

Chemical Name	Algae/aquatic plants EC50	Invertebrates EC50
1-(2-Hydroxypropyl) imidazole 37788-55-9	Desmodesmus subspicatus 50.69 mg/L 72 h (static)	Daphnia magna > 100 mg/L 48 h (static)

### Persistence/Degradability

Not determined

### Bioaccumulation

This product is not bioaccumulating. Partition coefficient = 0.0336.

### Mobility

This product is soluble in water.

### Other Adverse Effects

Not determined

## 13. DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

<b>Disposal of Wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

## 14. TRANSPORT INFORMATION

### Regulatory Entity

DOT	Not regulated
IATA	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

**Listed** TSCA, DSL/NDSL, EINECS/ELINCS, IECSC, AICS

#### **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 Substance*  
*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).

**SARA 302** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**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).

**SARA 311/312 Hazards** Acute health hazard

### United States State Regulations

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

### United States State Right-to-know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations.

## 16. OTHER INFORMATION

<b><u>NFPA</u></b>	<b>Health Hazards</b> Not determined	<b>Flammability</b> Not determined	<b>Instability</b> Not determined	<b>Special Hazards</b> Not determined
<b><u>HMIS</u></b>	<b>Health Hazards</b> 1	<b>Flammability</b> 1	<b>Physical Hazards</b> 0	<b>Personal Protection</b> Not determined
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<b>GHS Version</b>	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**