

# SAFETY DATA SHEET

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Replaces: October 1, 2000

Prepared By: Compliance Office

## 01. Product and Manufacturer Identification

Product Name **LINDRIDE 29 (All Types)**

Chemical Name 4,7-Methanoisobenzofuran-1,3-dione,3a,7,7a-tetrahydromethyl; Methyl bicyclo (2.2.1)hept-5-ene-2,3-dicarboxylic anhydride; Methyl-5-norbornene-2,3-dicarboxylic anhydride; 1,2,3,6-Tetrahydromethyl-3,6-methanophthalic anhydride

Chemical Family Alicyclic Dicarboxylic Anhydride

Manufacturer Lindau Chemicals, Inc.  
731 Rosewood Drive  
Columbia, SC 29201  
Phone: (803)799-6863  
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24 Hr. Emergency Telephone No: (800)457-4280

## 02. Composition

Product Name	CAS No.	EINECS NBR	R-phrases
Alicyclic Dicarboxylic Anhydride	25134-21-8	246-644-8	41/42/43

## 03. Hazards Identification

Induced contact cause allergic sensitization in 34 of 52 human subjects. Extremely irritating to eyes and respiratory tract. Can cause asthmatoïd reactions by lung sensitization.

### HMIS RATING

Health 3  
Flammability 1  
Reactivity 0

### HAZARD RATING

4 = Severe  
3 = Serious  
2 = Moderate  
1 = Slight  
0 = Minimal

## 04. First Aid Measures

Skin Contact: Remove contaminated clothing and flush skin thoroughly. Wash contaminated clothing before reuse. Discard contaminated shoes.

Eye Contact: Immediately flush with water for at least 15 minutes.

Inhalation: Remove person to fresh air.

Ingestion: Only if person is conscious, give water or milk to dilute. DO NOT induce vomiting. DO NOT attempt chemical neutralization.

#### 05. Fire-Fighting

Suitable extinguishing media: (1) Foam; (2) Carbon Dioxide; (3) Water in copious amounts

Special Fire Fighting Procedures: Respiratory protection against vapors and combustion products.

Unusual Fire and Explosion Hazards: No unusual hazard when product is in drums unless fire causes material to heat up and burn. The vapors and fumes can cause serious respiratory problems.

#### 06. Accidental Release

Clean up spills promptly. Avoid contact with liquid and vapors. Wear rubber boots and heavy rubber gloves. Ventilate contained areas. Absorb spills using "Speedy Dry" or similar absorbent and pick up. Hose spill area down with water.

#### 07. Handling and Storage

Avoid contact with eyes, skin or clothing. Avoid breathing vapors or aerosols. Store between 18°C (65°F) and 40°C (104°F) to avoid freezing and excessive vapors. Keep container closed. Store out of contact with moisture to avoid hydrolysis to free acid. Thaw frozen material below 40°C (104°F) and mix well before using.

## 08. Exposure Controls / Personal Protection

Technical measures/Precautions: No special precautions required.

Exposure limit(s): none

Skin: Wear Rubber Gloves.

Eyes: Safety glasses with side shields/ Full face shield if there is any possibility of splashing or eye contact.

Respiratory Protection: Wear NIOSH approved respirator equipped with cartridges for protection from organic, vapors, acid gases and particulates (HEPA); Respiratory selection should be chosen in accordance with NIOSH's Respirator Decision Logic Publication No. 87-108.

Ingestion: Accidental ingestion is an unlikely event. Normal handling and hygiene precautions should always be taken to avoid ingestion.

Other Protective Equipment: Appropriate clean clothing to prevent skin contact including long sleeve shirt, buttoned at wrists, and impervious gloves. Remove contaminated clothing and shoes immediately. Wash contaminated clothing before reuse. Safety shower.

## 09. Physical and Chemical Properties

Appearance	Pale Amber liquid
Odor	Slight
Boiling Point	ca 140°C @ 10 mm/Hg
Specific Gravity (H <sub>2</sub> O = 1)@ 15.4/4°C	1.245
Flash Point (COC)	275°F (135°C)
Solubility in water	Insoluble
Vapor Pressure (mm Hg @ 120°C)	5.0
Vapor Density (Air = 1)@20°C	6.1
Density	10.4 lbs/gal @ 15.4°C

## 10. Stability and Reactivity

Stability At ambient temperatures: Stable. Hydrolyzes to free acid in presence of moisture. At elevated temperatures: Decomposes.

Incompatibility Water, acid, base, oxidizing material.

NOTE: Material will react with water or steam to product heat. However, water in copious amounts, is appropriate for fire fighting.

Hazardous Decomposition Products Carbon Dioxide

Hazardous Polymerization Polymerizes @ 200°C (392°F)

Conditions to Avoid Excessive temperatures.

## 11. Toxicological Information

LD-50: Dermal: >2000mg/Kg (RBT)  
Oral: 958 (856 - 1077) mg/Kg (RAT)

Effects of Overexposure: Skin: Erythema, Itching, Dermatitis, Edema  
Eyes: Conjunctivitis, Chemosis, Corneal Opacity discharges, blurred vision.

Inhalation: Nasal irritation, discharge, coughing, difficulty in breathing, if sensitized, asthmatoïd reactions, severe breathing difficulty, chest pains, collapse.

## 12. Environmental Information

Spill and Leak Procedures: Clean up spills promptly. Avoid contact with liquid and vapors. wear rubber boots and heavy rubber gloves. Ventilate contained areas. Absorb spills using "Speedy Dry" or similar absorbent and pick up. Hose spill area down with water.

Waste Disposal Method: Deposit absorbent material saturated with product in a separate labeled, leak proof container and take to approved treatment, storage, or disposal facility.

### 13. Disposal Considerations

#### U. S. EPA RCRA/CERCLA/SARA Information:

Hazardous Waste Code: D002  
Hazardous Waste Class: Corrosive  
Physical Inventories Reportable Under 40 CFR 370: (Tier 2: Pure Liquid; immediate health effect (corrosive))

NMA is listed in the TSCA Inventory.

### 14. Transport Information

RID/ADR: Corrosive Liquid NOS/8/UN-1760/PGIII

IMDG: Corrosive Liquid NOS/8/UN-1760/PGIII

IATA: Corrosive Liquid NOS/8/UN-1760/PGIII

### 15. Regulatory Information

Symbol(s)	Xn-Harmful
contains	4,7-Methanoisobenzofuran-1,3-dione,3a,4,7,7a-tetrahydromethyl

R41 – Risk of serious damage to eyes.

R42/43 – May cause sensitization by inhalation or skin contact.

S (2) – Keep out of reach of children

S 24 – Avoid contact with skin

S 26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39 – Wear suitable gloves and eye/face protection

### 16. Other Information

This product should be stored and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. We believe all information given is accurate. It is offered in good faith, but without guarantee. Since conditions of use are beyond our control, all risks of use are assumed by the user. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents.