



# SAFETY DATA SHEET

Issue Date 31-July-1990

Revision Date 02-September-2020

Version 3

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Name** MALDENE 287

### Other Means of Identification

**SDS #** LC-054

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

**Recommended Use** Film former

### 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

**EMERGENCY OVERVIEW:** The information below relates to repeated and prolonged exposure. The supplier has indicated that eye exposure normally results in eye irritation or damage.

### Classification

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 1

### Signal Word

Danger

### Hazard Statements

H315: Causes skin irritation  
H318: Causes serious eye damage

**Appearance** Amber liquid**Physical State** Liquid**Odor** Musky**Precautionary Statements - Prevention**

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

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.

P310: Immediately call a POISON CENTER or doctor/physician.

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.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Copolymer of Maleic acid and 1,3-Butadiene	none	20–40
Tetrahydrophthalic acid	88-98-2	5–10
Water	7732-18-5	> 50

\*\* 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**

<b>General</b>	If exposed to this product in any way outside of normal handling and if there is concern about this exposure, get medical advice or attention.
<b>Inhalation</b>	Move person to fresh air. Get medical attention if there is continued irritation or discomfort.
<b>Eye Contact</b>	Rinse eyes immediately with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing holding eyelids wide open for at least 15 minutes. Get medical attention if irritation occurs or persists.
<b>Ingestion</b>	Immediately rinse mouth repeatedly with plenty of water. If possible, do not leave the person unattended. Get medical attention if discomfort or irritation occurs or persists.
<b>Skin Contact</b>	Thoroughly wash exposed area with plenty of soap and water while removing all contaminated clothing, including shoes. Launder contaminated clothing before reuse. Get medical attention if skin is damaged or if skin irritation develops or persists.

**Most Important Symptoms and Effects, both Acute and Delayed**

<b>Symptoms</b>	May cause skin irritation in some individuals upon prolonged contact. Eyes may be damaged and have symptoms of redness, itching, irritation and watering from overexposure.
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**Indication of any Immediate Medical Attention and Special Treatment Needed**

<b>Note to Physicians</b>	Treat symptomatically. Treatment of overexposure should be directed toward the control of symptoms and be based on the clinical condition of the patient.
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## 5. FIRE-FIGHTING MEASURES

### Extinguishing Media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

### Specific Hazards Arising from the Chemical

This product is not flammable.

**Hazardous Combustion Products**    None known

### Protective Equipment and Precautions for Firefighters

Use appropriate protective equipment for extinguishing burning of surrounding materials. 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

<b>Personal Precautions</b>	Use personal protective equipment as required (see Section 8). Persons not wearing protective equipment should be excluded from the area of the spill until clean-up has been completed. Ensure adequate ventilation. Avoid contact with skin and eyes.
<b>Environmental Precautions</b>	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

<b>Methods for Containment</b>	Ensure adequate ventilation. Stop spill at source, if safe to do. Dike area of spill to prevent spreading or entry into sewers, basements or confined areas. Pump liquid to salvage tanks or containers.
<b>Methods for Cleaning Up</b>	Spillage may be taken up with non-combustible, absorbent material. Collect resulting material in suitable containers for disposal. Clean up and dispose of material in accordance with federal, state and local regulations.

## 7. HANDLING AND STORAGE

### Precautions for Safe Handling

<b>Advice on Safe Handling</b>	Do not handle until all safety precautions have been read and understood. Use personal protection recommended in Section 8. Wash face, hands and any exposed skin thoroughly after handling. Avoid contact with skin and eyes. Use only with adequate ventilation. Keep containers tightly closed. Keep containers upright to prevent leakage.
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### Conditions for Safe Storage, Including any Incompatibilities

<b>Storage Conditions</b>	Keep containers tightly closed when not in use and store in a dry, cool and well-ventilated area. Avoid excessive temperatures.
<b>Packaging Materials</b>	Do not transfer to unmarked containers.
<b>Incompatible Materials</b>	Any material that readily reacts with water, such as a reactive metal

## 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** Apply standard technical measures for the safe, contained handling of chemicals.

### Individual Protection Measures, such as Personal Protective Equipment

**Eye/Face Protection** Wear approved safety goggles. Eye-wash facilities should be readily available.

**Skin and Body Protection** Wear chemical resistant, impermeable gloves. Wear suitable protective clothing.

**Respiratory Protection** Ensure adequate general ventilation.

**General Hygiene** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

<b>Physical State</b> <b>Appearance</b> <b>Color</b>	Liquid Amber liquid Amber	<b>Odor</b> <b>Odor Threshold</b>	Musky Not determined
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<u>Property</u>	<u>Values</u>	<u>Remarks/Method</u>
pH	1.0–3.0	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	100 °C (212 °F)	(minimum)
Flash Point	> 135 °C (> 275 °F)	(Tag closed cup)
Evaporation Rate	As water	
Flammability (Solid, Gas)	n/a-liquid	
Upper Flammability Limit	Not applicable	
Lower Flammability Limit	Not applicable	
Vapor Pressure	17 mm Hg	@ 20 °C (68 °F)
Relative Vapor Density	As water	
Specific Gravity	Not determined	
Water Solubility	Soluble	
Solubility in Other Solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	4000–12000 cP	
Explosive Properties	Not explosive	
Oxidizing Properties	Not determined	
Percent Volatile by Weight	> 50%	

## 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

High temperatures (>100°C)

### Incompatible Materials

Any material that readily reacts with water, such as a reactive metal

### Hazardous Decomposition Products

None known

## 11. TOXICOLOGICAL INFORMATION

### Information on Likely Routes of Exposure

<b>Inhalation</b>	Breathing small amounts during normal handling is not likely to cause harmful effects. Breathing large amounts may cause irritation of the respiratory tract.
<b>Eye Contact</b>	Exposure may cause serious eye damage.
<b>Ingestion</b>	Ingestion in sufficient amounts may cause gastrointestinal irritation.
<b>Skin Contact</b>	Prolonged exposure may cause skin irritation, drying or cracking.

### 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

<b>Mutagenicity</b>	Not determined
<b>Carcinogenicity</b>	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC, ACGIH or NTP.
<b>STOT – Single Exposure</b>	Not determined
<b>Aspiration Hazard</b>	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. Avoid discharges into drains and water systems and onto the ground.

### Persistence and Degradability

Not determined

### Bioaccumulation

Not determined

### Mobility

The product is soluble in water.

### Other Adverse Effects

Not determined

### Other Adverse Effects

Not determined

## 13. DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

#### **Disposal of Wastes**

Disposal should be in accordance with applicable federal, state and local laws and regulations.

#### **Contaminated Packaging**

Disposal should be in accordance with applicable federal, state and local laws and regulations.

## 14. TRANSPORT INFORMATION

### Regulatory Entity

DOT	Not regulated
RID/ADR	Not regulated
IMDG	Not regulated
IATA	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

**Component 88-98-2 Listed** TSCA, DSL/NDSL, EINECS/ELINCS, ENCS, IECSC, KECI, TCSI, 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 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 with known CAS numbers that are 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 with known CAS numbers 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**

Chemical Name	CAS No	Hazard
Tetrahydrophthalic acid	88-98-2	Acute health

### 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	CAS No	New Jersey	Pennsylvania
Tetrahydrophthalic acid	88-98-2	X	X

## 16. OTHER INFORMATION

<b>NEPA</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	1	0	0	Not determined
<b>HMIS</b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	1	0	0	Not determined
<b>Issue Date</b>	31-July-1990			
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<b>Revision Note</b>	Reviewed/updated			
<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**