



## Material Safety Data Sheet

### D(+)-RIBONIC ACID GAMMA-LACTONE, 96%

#### Section 1 - Chemical Product and Company Identification

MSDS Name: D(+)-RIBONIC ACID GAMMA-LACTONE, 96%  
Catalog Numbers: 22783-0000, 22783-0010, 22783-0100, 22783-0250  
Synonyms:

Company Identification: Acros Organics BVBA  
Janssen Pharmaceuticaaan 3a  
2440 Geel, Belgium  
Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410  
Company Identification: (USA)  
For information in the US, call: 800-ACROS-01  
For information in Europe, call: +32 14 57 52 11  
Emergency Number, Europe: +32 14 57 52 99  
Emergency Number US: 201-796-7100  
CHEMTREC Phone Number, US: 800-424-9300  
CHEMTREC Phone Number, Europe: 703-527-3887

#### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
5336-08-3	D(+)-RIBONIC ACID GAMMA-LACTONE	96%	226-256-5

Hazard Symbols: None listed  
Risk Phrases: None listed

#### Section 3 - Hazards Identification

##### EMERGENCY OVERVIEW

Not available

#### Potential Health Effects

The toxicological properties of this substance have not been fully investigated.

#### Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.  
Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.  
Ingestion: Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.  
Inhalation: Remove from exposure and move to fresh air immediately.  
Notes to Physician:

#### Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.  
Extinguishing Media: In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

#### Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.  
Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then

Spills/Leaks: place into a suitable container for disposal.

### Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage: Store in a cool, dry place. Keep container closed when not in use.

### Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

Exposure  
Limits

CAS# 5336-08-3:

### Personal Protective Equipment

Eyes: Wear safety glasses and chemical goggles if splashing is possible.

Skin: Wear safety glasses and chemical goggles if splashing is possible.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

### Section 9 - Physical and Chemical Properties

Physical State: Crystalline powder

Color: white to off-white

Odor: Not available

pH: Not available

Vapor Pressure: Not available

Viscosity: Not available

Boiling Point: Not available

Freezing/Melting Point: 83.00 - 85.00 deg C

Autoignition Temperature: Not available

Flash Point: Not available

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

Decomposition Temperature: Not available

Solubility in water: soluble

Specific Gravity/Density:

Molecular Formula: C<sub>5</sub>H<sub>8</sub>O<sub>5</sub>

Molecular Weight: 148.12

### Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, strong oxidants.

Incompatibilities with Other Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Has not been reported.

### Section 11 - Toxicological Information

RTECS#: CAS# 5336-08-3: None listed

LD50/LC50: RTECS: Not available.

Carcinogenicity: D(+)-RIBONIC ACID GAMMA-LACTONE - Not listed as a carcinogen by ACGIH, IARC, NTP, or

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

	IATA	IMO	RID/ADR
Shipping Name:	Not available	Not available	Not available
Hazard Class:			
UN Number:			
Packing Group:			

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available

Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 5336-08-3: Not available

Canada

US Federal

TSCA

CAS# 5336-08-3 is not listed on the TSCA Inventory. It is for research and development use only.

Section 16 - Other Information

MSDS Creation Date: 7/16/1996

Revision #0 Date Original.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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