

Date of issue: 01/24/2025

### Reviewed on 01/09/2025





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#### Trade name: Gamma Nonalactone EU natural

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- · Other hazards
- Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Classification according to (d)(1)(ii) of § 1910.1200

The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.

• **Hazards not otherwise classified** There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

### 3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description
- CAS: 104-61-0 gamma-Nonalactone
- · Identification number(s)
- EC number: 203-219-1

### 4 First-aid measures

- · Description of first aid measures
- General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

### 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or alcoholresistant foam.

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.

- · Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.
- · Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.

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#### • Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). • Protective Action Criteria for Chemicals

· PAC-1:

Substance is not listed.

· PAC-2:

Substance is not listed.

· PAC-3:

Substance is not listed.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and storage

· Precautions for safe handling No special measures required.

· Information about protection against explosions and fires: No special measures required.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- **Requirements to be met by storerooms and receptacles:** Please refer to the product specification and/or Certificate of Analysis for product storage requirements.

Information about storage in one common storage facility: Not required.

- Further information about storage in one common storage facility
- Further information about storage conditions: None.
- Specific end use(s) No further relevant information available.

# 8 Exposure controls/personal protection

- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as a basis.
- · Exposure controls
- Appropriate engineering controls No further data; see section 7.
- · Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- · Breathing equipment: Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material should be based on consideration of the penetration times, rates of diffusion and the degradation

#### Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

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• Penetration time of glove material The exact break through time has to be determined by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Goggles recommended during refilling.

Information on basic physical and chemic	al properties
General Information	
Physical state	Liquid
Color:	According to product specification
Odor:	According to product specification
Odor threshold:	Not determined.
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	121 °C (249.8 °F)
Flammability:	Not applicable.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	126 °C (258.8 °F)
Decomposition temperature:	Not determined.
pH-value:	Not determined.
Viscosity:	
Kinematic:	Not determined.
Dynamic:	Not determined.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	Not determined.
Vapor pressure:	Not determined.
Vapor pressure:	
Density at 20 °C (68 °F):	0.96 g/cm³ (8.0112 lbs/gal)
Relative density	Not determined.
Refractive Index	
Vapor density	Not determined.
Particle characteristics	Not applicable.
Other information	
Appearance:	
Form:	Liquid
Important information on protection of hea	Liquid
and environment, and on safety.	aitii
Ignition temperature:	Not determined.
Danger of explosion:	
VOC content:	Product does not present an explosion hazard. 0.00 %
voc content:	
Change in condition	0.0 g/l / 0.00 lb/gal
Change in condition Evaporation rate	Not determined.

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### 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

### 11 Toxicological information

- · Information on toxicological effects
- Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- The substance is not subject to classification.
- · Interactive effects No interactive effects between components are known.
- Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

Substance is not listed.

#### • NTP (National Toxicology Program)

Substance is not listed.

#### · OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

· Alternative sources for toxicological information

No non-standard sources for toxicological information where used.

# 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects
- · Additional ecological information:
- General notes:
- Water hazard class 1 (Assessment by list): slightly hazardous for water

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(Continuation of page 5) Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### 13 Disposal considerations

- · Waste treatment methods
- **Recommendation:** Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

Transport information	
UN-Number	
DOT, ADN, IMDG, IATA	Not Regulated
UN proper shipping name DOT, ADN, IMDG, IATA	Not Regulated
Transport hazard class(es)	
DOT, ADN, IMDG, IATA	
Class	Not Regulated
Packing group	
DOT, IMDG, IATA	Not Regulated
Environmental hazards:	
Marine pollutant:	No
Transport in bulk according to Annex	ll of
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
Special precautions for user	Not applicable.
UN "Model Regulation":	Not Regulated

### 15 Regulatory information

 $^{\rm \cdot}$  Safety, health and environmental regulations/legislation specific for the substance or mixture  $^{\rm \cdot}$  Sara

Section 355 (extremely hazardous substances):

Substance is not listed.

Section 313 (Specific toxic chemical listings):

Substance is not listed.

• TSCA (Toxic Substances Control Act):

ACTIVE

### Hazardous Air Pollutants

Substance is not listed.

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- · Chemicals known to cause cancer:
- Substance is not listed.

· Proposition 65

- · Chemicals known to cause reproductive toxicity for females:
- Substance is not listed.
- Chemicals known to cause reproductive toxicity for males:
- Substance is not listed.
- · Chemicals known to cause developmental toxicity:
- Substance is not listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency)
- Substance is not listed.
- · TLV (Threshold Limit Value)
- Substance is not listed.
- NIOSH-Ca (National Institute for Occupational Safety and Health)
- Substance is not listed.
- · GHS label elements
- Pictograms on label shall be in the shape of a square set at a point and shall include a black hazard symbol on a white background with a red frame sufficiently wide to be clearly visible.
- · Hazard pictograms Not Applicable
- Signal word Not Applicable
- · Hazard statements Not Applicable
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

# 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product Safety Department
- Contact: Product Safety Department productsafety@adv-bio.com
  Date of previous version 01/10/2023
  Date of preparation 01/24/2025
  Abbreviations and acronyms: ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)
- CAS: Chemical Abstracts Service (division of the American Chemical Society NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- VOC: Volatile Organic Compounds (USA, EU)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- NIOSH: National Institute for Occupational Safety
- OSHA: Occupational Safety & Health
- TLV: Threshold Limit Value

US



# Safety Data Sheet acc. to OSHA HCS (29 CFR § 1910.1200)

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PEL: Permissible Exposure Limit REL: Recommended Exposure Limit