



Safety Data Sheet

According to Regulation (EC) 1907/2006



A581 gamma-Butyrolactone

Identification of the substance/preparation and of the company or firm

1.1 Identification of the substance or preparation

Name:

gamma-Butyrolactone

Synonym:

4-Hydroxybutiric Acid Lactone, BLO

REACH Registration Number: A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) N° 1907/2006, the annual tonnage does not require a registration, the registration is envisaged for a later registration deadline or it is a mixture.

1.2 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

1.3 Identification of the company or firm:

PANREAC QUIMICA S.L.U.

C/Garraf 2

Polígono Pla de la Bruguera

E-08211 Castellar del Vallès

(Barcelona) Spain

Tel. (+34) 937 489 400

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1.4 Emergency telephone:

Single telephone number for emergency calls: 112 (EU)

Tel.: (+34) 937 489 499

Identification of dangers

Classification of the substance or the mixture.

Classification Regulation (CE) n° 1272/2008.

Acute Tox. 4

Eye Irrit. 2

Hazard Pictograms



Signal word

Warning

Hazard statements

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

Precautionary statements

P264 Wash...thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents/container according to Directive 94/62/CE or 2008/98/CE.

Classification (67/548/CEE or 1999/45/CE).

Xn Harmful
R36
R22

For the full text of the R-phrases mentioned in this section, see section 16.

Component Composition/Information

Name: gamma-Butyrolactone

Formula: C₄H₆O₂ M.= 86,09 CAS [96-48-0]

EC number (EINECS): 202-509-5

First aid

4.1 General indications:

Never provide drink or induce vomiting in the event of loss of consciousness.

4.2 Inhaling:

Take the person out into the fresh air.

4.3 Contact with the skin:

Wash with plenty of water. Remove contaminated clothing.

4.4 Eyes:

Wash with plenty of water (for at least 15 minutes), keeping eyelids open.

4.5 Swallowing:

Drink large amounts of water. Induce vomiting. Induce vomiting.
Seek medical assistance. Seek medical assistance.

Fire-fighting means

5.1 Suitable fire-extinguishing means:

Dry powder. Carbon dioxide (CO₂).

5.2 Fire-fighting means which must NOT be used:

No specific data.

5.3 Special risks:

Combustible. Keep away from sources of ignition. In the event of fire, toxic fumes may form. The fumes are heavier than air, so they may spread at floor level.

5.4 Protective equipment:

Suitable clothing and footwear.

Measures to be taken in the event of accidental spillage

6.1 Individual precautions:

No special indications.

6.2 Precautions for care of the environment:

Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

6.3 Methods for collection/cleaning:

Collect up with absorbent materials (Panreac General Absorbent, Kieselguhr, etc.) or, if none available, dry sand or earth, and deposit in waste containers for subsequent elimination in accordance with current legislation.

Handling and storage

7.1 Handling:

No special indications.

7.2 Storage:

Well sealed containers. Dry atmosphere. In a cool place. In well ventilated premises.

Staff exposure/protection controls

8.1 Technical protective measures:

No special indications.

8.2 Exposure limit control:

: Data not available.

8.3 Respiratory protection:

In the event of fumes forming/aerosols, use suitable respiratory protection.

8.4 Hand protection:

Use suitable gloves

8.5 Eye protection:

Use suitable goggles.

8.6 Individual hygiene measures:

Remove contaminated clothing. Use suitable work clothing. Wash hands before breaks and when the job is done.

8.7 Environmental exposure controls:

Fulfill the commitments under local environmental protection legislation.

Physical and chemical properties

Appearance: liquid

Colour: Colourless

Granulometry: N/A

Odour: Characteristic.

pH: 4,5 (100g/l)

Melting point/freezing point: -44 °C

Initial boiling point and boiling range: 205 °C
Flash point: 98 °C
Flammability (solid, gas): N/A
Upper/lower flammability or explosive limits: 16 %(V) / 3,6 %(V)
Vapour pressure: 1,5 hPa (20 °C)
Vapour density: N/A
Relative density: (20/4) 1,129
Solubility: Miscible with water
Partition coefficient: n-octanol/water: N/A
Auto-ignition temperature: 455 °C
Decomposition temperature: N/A
Viscosity: N/A

Stability and reactivity

10.1 Conditions which should be avoided:

The product is chemically stable under standar ambient conditions (room temperature).

10.2 Matter which should be avoided:

Strong oxidant agents.

10.3 Hazardous decomposition products:

No specific data.

10.4 Complementary information:

Hygroscopic. Moisture sensitive.

Toxicological information

- **Acute toxicity:**

LD50 oral rat : 1.540 mg/kg

LD50 ipr mus : 1.100 mg/kg

- **Dangerous effects for health:**

Through contact with the eyes: irritations If swallowed: Irritations of the mucosae in the mouth, throat, oesophagus and intestinal tract. If it is absorbed in large quantities: tiredness narcosis Other dangerous characteristics are not discarded. Take the usual precautions for handling chemical products.

Environmental information

12.1 Toxicity:

12.1.1 - EC50 test (mg/l):

12.1.2. - Receptor medium:

Risk for the water environment

Risk for the land environment

12.1.3. - Observations:

Ecotoxic data not available.

12.2 Persistence and Degradability :

12.2.1 - Test:

12.2.2. - Biotic degradation classification:

BOD5/COD

Biodegradability

12.2.3. - Abiotic degradation depending on pH:

12.2.4. - Observations:

Data not available.

12.3 Bioaccumulative potential:

12.3.1. - Test:

12.3.2. - Bioaccumulation:

Risk

12.3.3. - Observations:

Data not available.

12.4 Mobility in soil :

Data not available.

12.5 Assessment PBT and MPMB :

Data not available.

12.6 Other possible effects on the environment:

Product hardly pollutant for water.

Do not allow it to enter soils or water channels.

Considerations regarding elimination

13.1 Substance or preparation:

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country.

In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.

2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes. Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

13.2 Contaminated containers:

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

Information concerning transport

Not classified as dangerous in the meaning of transport regulations.

Regulatory information

The substance is subject to Regulation (EC) No 273/2004 of the European Parliament and of the Council, of 11 February 2004 on drug precursors, Council Regulation (EC) No 111/2005 of 22 December 2004 laying down rules for the monitoring of trade between the Community and third countries in drug precursors, Commission Regulation (EC) No 1277/2005 of 27 July 2005 laying down implementing rules for Regulation (EC) No 273/2004 of the European Parliament and of the Council on drug precursors and for Council Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors.

Other information

Other precautionary statements

P330 Rinse mouth.

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

Labelling (65/548/CEE or 1999/45/CE)

R-phrases(s):	R36 Irritating to eyes. R22 Harmful if swallowed.
S-phrases(s):	S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.

In respect of the previous review, changes have been made to the following sections: 2, 3, 15

Date published: 3.11.10

Review number and date: 3 3.11.10