

# SAFETY DATA SHEETS

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Sixth revised edition

Version: 2.0

Creation Date: Oct 8, 2012

Revision Date: Oct 8, 2012

## Gamma Butyrolactone (GBL)

**CAS No: 96-48-0**

**Molecular Weight: 86.09**

**Molecular Formula: C<sub>4</sub>H<sub>6</sub>O<sub>2</sub>**

### 1. Identification

#### 1.1 GHS Product identifier

**Product name** Gamma Butyrolactone

#### 1.2 Other means of identification

**Product number** -  
**Other names** gamma-BL

#### 1.3 Recommended use of the chemical and restrictions on use

**Identified uses** For industry use only.  
**Uses advised against** no data available

#### 1.4 Supplier's details

**Company** Welinks Group(Zhangjiagang) Co.,Ltd  
**Address** Room 700, Guotai Oriental Plaza, Zhangjiagang City, , Jiangsu Province, China 215600  
**Tel** +86-512-58695855  
**Fax** +86-512-58695855

#### 1.5 Emergency phone number

**Emergency phone number** +86-512-58695855

**Service hours** Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

## 2.Hazard identification

### 2.1 Classification of the substance or mixture

Acute toxicity - Oral, Category 4

Serious eye damage, Category 1

Specific target organ toxicity \u2013 single exposure, Category 3

### 2.2 GHS label elements, including precautionary statements



**Pictogram(s)**

**Signal word**

Danger  
H302 Harmful if swallowed

**Hazard statement(s)** H318 Causes serious eye damage

**Precautionary statement(s)**

H336 May cause drowsiness or dizziness

P264 Wash ... thoroughly after handling.

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

**Prevention**

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

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor\u2026if you feel unwell.

P330 Rinse mouth.

**Response**

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

P310 Immediately call a POISON CENTER/doctor\u2026

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for

breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

**Storage**

P405 Store locked up.

**Disposal**

P501 Dispose of contents/container to ...

## 2.3 Other hazards which do not result in classification

none

## 3.Composition/information on ingredients

### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
\u03b3-butyrolactone	\u03b3-butyrolactone	96-48-0	none	100%

## 4.First-aid measures

### 4.1 Description of necessary first-aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms/effects, acute and delayed

no data available

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

no data available

## **5.Fire-fighting measures**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **5.2 Specific hazards arising from the chemical**

no data available

### **5.3 Special protective actions for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary.

## **6.Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### **6.3 Methods and materials for containment and cleaning up**

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## **7.Handling and storage**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

### **7.2 Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

## **8.Exposure controls/personal protection**

## 8.1 Control parameters

### Occupational Exposure limit values

no data available

### Biological limit values

no data available

## 8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 8.3 Individual protection measures, such as personal protective equipment (PPE)

### Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique(without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

### Respiratory protection

Wear dust mask when handling large quantities.

### Thermal hazards

no data available

## 9. Physical and chemical properties

<b>Physical state</b>	colourless oily liquid
<b>Colour</b>	no data available
<b>Odour</b>	no data available
<b>Melting point/ freezing point</b>	57\u00b0C(lit.)
<b>Boiling point or initial boiling point and boiling range</b>	75\u00b0C/41mmHg(lit.)
<b>Flammability</b>	no data available
<b>Lower and upper explosion limit / flammability limit</b>	no data available

<b>Flash point</b>	101\u00b0C(lit.)
<b>Auto-ignition temperature</b>	no data available
<b>Decomposition temperature</b>	no data available
<b>pH</b>	no data available
<b>Kinematic viscosity</b>	no data available
<b>Solubility</b>	In water:MISCIBLE
<b>Partition coefficient n-octanol/water (log value)</b>	no data available
<b>Vapour pressure</b>	1.5 mm Hg ( 20 \u00b0C)
<b>Density and/or relative density</b>	1.12\u00a0g/mL\u00a0at 25\u00a0\u00b0C(lit.)
<b>Relative vapour density</b>	3 (vs air)
<b>Particle characteristics</b>	no data available

## **10.Stability and reactivity**

### **10.1 Reactivity**

no data available

### **10.2 Chemical stability**

Stable under recommended storage conditions.

### **10.3 Possibility of hazardous reactions**

no data available

### **10.4 Conditions to avoid**

no data available

### **10.5 Incompatible materials**

no data available

### **10.6 Hazardous decomposition products**

no data available

## **11.Toxicological information**

### **Acute toxicity**

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

### **Skin corrosion/irritation**

no data available

### **Serious eye damage/irritation**

no data available

### **Respiratory or skin sensitization**

no data available

### **Germ cell mutagenicity**

no data available

### **Carcinogenicity**

no data available

### **Reproductive toxicity**

no data available

### **STOT-single exposure**

no data available

### **STOT-repeated exposure**

no data available

### **Aspiration hazard**

no data available

## **12.Ecological information**

### **12.1 Toxicity**

- Toxicity to fish: no data available
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

### **12.2 Persistence and degradability**

no data available

### **12.3 Bioaccumulative potential**

no data available

## **12.4 Mobility in soil**

no data available

## **12.5 Other adverse effects**

no data available

## **13. Disposal considerations**

### **13.1 Disposal methods**

#### **Product**

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### **Contaminated packaging**

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

## **14. Transport information**

### **14.1 UN Number**

ADR/RID: UN1993 IMDG: UN1993 IATA: UN1993

### **14.2 UN Proper Shipping Name**

ADR/RID: FLAMMABLE LIQUID, N.O.S.

IMDG: FLAMMABLE LIQUID, N.O.S.

IATA: FLAMMABLE LIQUID, N.O.S.

### **14.3 Transport hazard class(es)**

ADR/RID: 3 IMDG: 3 IATA: 3

### **14.4 Packing group, if applicable**

ADR/RID: III IMDG: III IATA: III

### **14.5 Environmental hazards**



ADR/RID: no IMDG: no IATA: no

## 14.6 Special precautions for user

no data available

## 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

## 15.Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
\u03b3-butyrolactone	\u03b3-butyrolactone	96-48-0	none
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.

## 16.Other information

### Information on revision

**Creation Date** Oct 8, 2012

**Revision Date** Oct 8, 2012

### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%