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## **Material Safety Data Sheet**

According to Regulation (EC) No. 1907/2006

Revision: 01

Date of Revision: 22.11.2010

## 1. Identification of the substances/ mixture and of the company/ undertaking

#### 1.1 Product Identifiers

Product Code TC223

Product Name β-Propiolactone

Cell Culture Tested

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Laboratory chemicals, Manufacture of substances

## 1.3 Details of the supplier of the safety data sheet

Produced by HiMedia Laboratories Pvt. Ltd.

Address 23, Vadhani Indl.Estate, LBS Marg, Mumbai 400 086, India.

Tel. No. +91-22-2500 0970, +91-22-2500 1607

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## 1.4 Emergency Tel. No.

Emergency Tel.No. Please contact the regional HiMedia representation in your country

## 2. Hazards Identification

#### 2.1 Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Skin corrosion/irritation (Category 2)

Serious eye damage/eye irritation (Category 2A)

Acute toxicity, inhalation (Category 1, 2)

Carcinogenicity (Category 1A, 1B)

## Classification according to EU Directives 67/548/EEC or 1999/45/EC

May cause cancer.

Very toxic by inhalation.

Irritating to eyes and skin.

## 2.2 Label elements

## Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram





Signal word Danger

## Hazard Statement(s)

H315 Causes skin irritation

H319 Causes serious eye irritation

H330 Fatal if inhaled H350 May cause cancer

## Precautionary Statement(s)

P201 Obtain special instructions before use.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P284 Wear respiratory protection.

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 or doctor/physician.

## According to European Directive 67/548/EEC as amended.

## Symbol(s)



R-Phrase(s)

R45 May cause cancer.
R26 Very toxic by inhalation.
R36/38 Irritating to eyes and skin.

S-Phrase(s)

Avoid exposure - obtain special instructions before use.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where

possible).

#### 2.3 Other hazards - none

## 3. Composition/Information on Ingredients

#### 3.1 Substances

Synonym: 2-Oxetanone; 3-Hydroxypropionic acid lactone; Hydracylic acid-â-lactone

Molecular Formula C<sub>3</sub> H<sub>4</sub> O<sub>2</sub>
Molecular Weight. 72.06

Component		Concentration
β-Propiolactone, Cell	Culture Tested	
CAS-No.	57-57-8	
EC-No.	200-340-1	

#### 4. First Aid Measures

## 4.1 Description of 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 and effects, both acute and delayed

No data available

## 4.3 Indication of immediate medical attention and special treatment needed

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 Special hazards arising from the substance or mixture

No data available

## 5.3 Precautions for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 5.4 Further information

No data available

#### 6 Accidental Release Measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

## **6.2** Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

## **6.4** Reference to other sections

For disposal see Section 13.

## 7 Handling and Storage

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.

## 7.3 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended Storage Temperature: Store at -20°C

## 7.3 Specific end uses

No data available

## 8 Exposure Controls/Personal Protection

## 8.1 Control parameters

Components with workplace control parameters

## 8.2 Exposure controls

## Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## Personal protective equipment

#### Hygiene measure

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands face after working with the substance

## **Eve/face protection**

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

## Skin protection

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.

#### **Body protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific work place.

## **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK(EN 14387) respirator cartridges as a backup to the engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## **Environment exposure controls**

Do not empty into drains

## 9 Physical and chemical properties

# 9.1 Information on basic physical and chemical properties

Appearance Colorless to very faint yellow liquid.

Odour No data available Odour Threshold No data available Odour Threshold No data available No data available Melting/freezing point No data available Initial boiling point and boiling range No data available No data available Flash point Upper/lower flammability or explosive limits No data available Vapour pressure No data available Vapour density No data available Relative density No data available Water Solubility No data available Partition coefficient: n-octanol/Water No data available **Autoignition Temperature** No data available No data available

Autoignition Temperature

Decomposition Temperature

Viscosity

Explosive properties

Oxidizing properties

No data available

## 9.2 Other safety information

No data available

## 10 Stability and Reactivity

#### 10.1 Reactivity

No data available

#### 10.2 Chemical stability

No data available

## 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

No data available

# 10.5 Incompatible materials

Strong oxidizing agents

## 10.6 Hazardous decomposition products

Other decomposition products - No data available

## 11 Toxicological Information

# 11.1 Information on toxicoligical effects

**Acute toxicity** 

No data available

#### Skin corrosion/irritation

No data available

## Serious eye damage/eye irritation

No data available

## Respiratory or skin sensitisation

No data available

#### Germ cell mutagenicity

No data available

## Carcinogenicity

IARC: No component of this product present at levels greater than orequal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

## **Reproductive toxicity**

No data available

# Specific target organ toxicity- single exposure

No data available

#### **Aspiration hazard**

No data available

#### **Potential Health Effects**

Inhalation.

Refer Section 2

Skin

Refer Section 2

**Eyes** 

Refer Section 2

Ingestion

Refer Section 2

## **Additional Information**

RTECS: RQ7350000

## 12 Ecological Information

## 12.1 Toxicity

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 PBT and vPvB assessment

No data available

#### 12.6 Other adverse effects

No data available

#### 13 Disposal Considerations

## 13.1 Waste treatments methods

#### **Product**

Offer surplus and non-recyclable solutions to a licenced disposal company. Contact a licenced professional waste disposal service to dispose of this material.

## 13.2 Contaminated packaging

Dispose of as unused product.

## 14 Transport Information

14.1 UN-No.

ADR/RID: 3382 IMDG: 3382 IATA: 3382

14.2 UN proper shipping name

ADR/RID :  $\beta$ -Propiolactone, Cell Culture Tested IMDG :  $\beta$ -Propiolactone, Cell Culture Tested IATA :  $\beta$ -Propiolactone, Cell Culture Tested

14.3 Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

14.4 Packaging group

ADR/RID: 1 IMDG: 1 IATA: 1

14.5 Environmental hazards

ADR/RID: No IMDG: Marine Pollutant: No IATA: No

## 14.6 Special precautions for use

No data available

## 15 Regulatory Information

This safety datasheet complies with the requirements of Regulation(EC) No.1907/2006

15.1 Safety health and environment regulations/legislation specific for the substance or mixture

## 15.2 Chemical Safety Assessment

No data available

# 16 Other Information Further information

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