

# Material Safety Data Sheet

according to EC-Regulation No. 1272/2008

updated: 02/2016

Version: 1.0

## Section I - Product and Company Information

Product Name	Reduced Glutathione (GSH)
Product Number	PK-CA577-1242-5
Product Classification	Cell Biology Reagents
Company and Contact Information	PromoCell GmbH Sickingenstrasse 63/65 69126 Heidelberg Germany Phone: +49 6221 – 649 34 0 E-mail: info@promokine.info

## Section II – Composition/Information on Ingredients

Component	CAS Number	EC-No.	MW	Chemical Formula
Reduced Glutathione (GSH)	70-18-8	200-725-4	307.3	C <sub>10</sub> H <sub>17</sub> N <sub>3</sub> O <sub>6</sub> S

## Section III – Hazard Information

Component	Description	Volume	Safety Information
Reduced Glutathione (GSH)	Solid	5 g	See below

### Reduced Glutathione (GSH):

#### Emergency Overview

**OSHA Hazards:** No known OSHA hazards

**GHS Classification:** Acute toxicity, Oral (Category 5)

**GHS Label elements, including precautionary statements**

**Pictogram:** none

**Signal word:** Warning

**Hazard statement(s):** H303 May be harmful if swallowed

**Precautionary statement(s):** none

#### HMIS Classification

**Health hazard:** 1

**Flammability:** 0

**Physical hazards:** 0

#### NFPA Rating

**Health hazard:** 0

**Fire:** 0

**Reactivity Hazard:** 0

#### Potential Health Effects

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes:** May cause eye irritation.

**Ingestion:** May be harmful if swallowed.

## Section IV – First Aid Measures

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**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:** Flush eyes with water as a precaution.

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

## Section V – Fire-Fighting Measures

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for fire-fighters:** Wear self-contained breathing apparatus for firefighting if necessary.

**Hazardous combustion products:** Hazardous decomposition products formed under fire conditions— carbon oxides, nitrogen oxides, sulfur oxides.

**Further information:** Not flammable or combustible

## Section VI – Accidental Release Measures

**Personal precautions:** Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation.

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

**Methods for cleaning up:** Sweep up and shovel. Keep in suitable, closed containers for disposal.

## Section VII – Handling and Storage

### Precautions for safe handling

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Avoid breathing dust.

### Conditions for safe storage

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

Recommended storage temperature: -20 °C

## Section VIII – Exposure Controls/Personal Protection

Contains no substances with occupational exposure limit values.

### Personal protective equipment

#### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN(EU).

#### Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique 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.

#### Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

#### Skin and body protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN(EU).

#### Hygiene measures

General industrial hygiene practice.

## Section IX – Physical and Chemical Properties

Property	Reduced Glutathione (GSH)
Appearance:	White powder
pH:	No data available
Water Solubility:	Soluble

<b>Other Solubility:</b>	No data available
<b>Boiling Point (°C):</b>	No data available
<b>Melting Point (°C):</b>	192-195 °C (378-383 °F)
<b>Flash Point (°C):</b>	No data available
<b>Ignition Temp. (°C):</b>	No data available
<b>Density:</b>	No data available

## Section X – Stability and Reactivity

Property	Reduced Glutathione (GSH)
<b>Chemical stability:</b>	Stable under recommended storage conditions
<b>Conditions to avoid:</b>	Not available
<b>Materials to avoid:</b>	Strong oxidizing agents
<b>Hazardous decomposition products:</b>	Carbon oxides, nitrogen oxides, sulfur oxides

## Section XI – Toxicological Information

### Reduced Glutathione (GSH):

#### Acute toxicity:

**Oral LD50:** LD50 Oral – mouse– >5,000 mg/kg

**Inhalation LC50:** no data available

**Dermal LD50:** no data available

**Other information on acute toxicity:** no data available

**Skin corrosion/irritation:** no data available

**Serious eye damage/eye irritation:** no data available

**Respiratory or skin sensitization:** no data available

**Germ cell mutagenicity:** no data available

#### Carcinogenicity:

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

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** no data available

**Teratogenicity:** no data available

**Aspiration hazard:** no data available

#### Potential Health Effects

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes:** May cause eye irritation.

**Ingestion:** May be harmful if swallowed.

**Additional information:** RTECS: MC0556000

## Section XII – Ecological Information

### Reduced Glutathione (GSH):

**Persistence and degradability:** no data available

**Toxicity:** no data available

**Bioaccumulative potential:** no data available



**PBT and vPvB assessment:** no data available

**Other adverse effects:** no data available

### Section XIII – Disposal Information

**Product:** Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging:** Dispose of as unused product.

### Section XIV – Transport Information

**Reduced Glutathione (GSH):**

**DOT (US):** Not dangerous goods.

**IMDG:** Not dangerous goods.

**IATA:** Not dangerous goods.

### Section XV – Regulatory Information

**OSHA Hazards:** No known OSHA hazards

**SARA 302 Components:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. **SARA**

**313 Components:** SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title II, Section 313.

**SARA 311/312 Hazards:** No SARA hazards

**Massachusetts Right To Know Components:** No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components:** Glutathione CAS-No. 70-18-8

**New Jersey Right To Know Components:** Glutathione CAS-No. 70-18-8

**California Prop. 65 Components:** This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

#### EU Regulations:

Component	Risk Phrases	Safety Phrases
Reduced Glutathione (GSH)	R22	--

### Section XVI - Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. PromoCell shall not be held liable for any damage resulting from handling or from contact with the above product

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