



# L-GLUTATHIONE REDUCED

# SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

Product Name: L-Glutathione reduced Product Code: 757 CAS#: 70-18-8 Synonym: γ-L-Glutamyl-L-cysteinyl-glycine Chemical Name: Not available Chemical Formula: C<sub>10</sub>H<sub>12</sub>N<sub>3</sub>O<sub>6</sub>S. Formula weight : 307.32

# SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

Composition: Name: L-Glutathione reduced Toxicological Data on Ingredients: Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. This substance is not classified as dangerous according to Directive 67/548/EEC.

# **SECTION 3: HAZARDS IDENTIFICATION**

Classification of the substance or mixture Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008. Potential Acute Health Effects: Not available. Potential Chronic Health Effects: Not available. Carcinogenic Effects: Not available. Mutagenic Effects: Not available. Teratogenic Effects: Not available. Developmental Toxicity: Not Available

# **SECTION 4: FIRST AID MEASURES**

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: 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.
Most important symptoms and effects, both acute and delay: No data available
Indication of any immediate medical attention and special treatment needed: No data available

# SECTION 5: FIRE AND EXPLOSION DATA

Extinguishing media Suitable extinguishing media Water Foam Carbon dioxide (CO2) Dry powder. Special hazards arising from the substance or mixture Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.





# MATERIAL SAFETY DATA SHEET

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures** Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust. **Environmental precautions** Do not let product enter drains.

**Methods and materials for containment and cleaning up** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers.

### **SECTION 7: HANDLING AND STORAGE**

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. **Conditions for safe storage, including any incompatibilities** 

Tightly closed. Dry.

Recommended storage temperature 2 - 8 °C

Storage Class:

Not available.

### Specific end use(s) A part from the uses:

No other specific uses are stipulated

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Exposure controls**

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

### **Personal protective equipment**

**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** 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.

**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 workplace.

**Respiratory protection** For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). **Control of environmental exposure** Do not let product enter drains.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form	: Powder
Colour	: White
Odour	: Not available
Odour Threshold	: Not available
рН	: Not available
Melting point/freezing point	: 192 – 195°C
Initial boiling point and boiling range	: Not available
Flash point	: Not available
Evapouration rate	: Not available
Flammability (solid, gas)	: Not available



# **MATERIAL SAFETY DATA SHEET**

Upper/lower flammability or explosive limits
Vapour pressure
Vapour density
Relative density
Water solubility
Partition coefficient
Auto-ignition temperature
Relative density Water solubility Partition coefficient

: Not applicable : Not available : Not available

# SECTION 10: STABILITY AND REACTIVITY DATA

Reactivity no data available Chemical stability The product is chemically stable under standard ambient conditions (room temperature). Possibility of hazardous reactions : Violent reactions possible with: Strong oxidizing agents Conditions to avoid :

Conditions to avoid : Not available. Incompatible materials Strong oxidizing agents. Hazardous decomposition products Other decomposition products - In the event of fire

### SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects : Not available Skin corrosion/irritation no data available Serious eye damage/eye irritation no data available Respiratory or skin sensitization 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.

### SECTION 12: ECOLOGICAL INFORMATION

Toxicity: Not available Persistence and degradability: Not available Bioaccumulative potential no data available Mobility in soil no data available Results of PBT and vPvB assessment PBT/vPvB assessment not available Other adverse affects no data available

### SECTION 13: DISPOSAL CONSIDERATIONS

**Waste treatment methods** Product Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging Dispose of as unused product.

# **SECTION 14: TRANSPORT INFORMATION**

UN	number:
AD	R/RID:
UN	proper shipping name

IMDG:

IATA:



ADR/RID: Not dangerous goods

IMDG: Not dangerous goods		
IATA: Not dangerous goods		
Transport hazard class(es):		
ADR/RID:	IMDG:	IATA:
Packaging group:		
ADR/RID:	IMDG:	IATA:
Environmental hazards:		
ADR/RID: No	IMDG Marine pollutant: No	IATA: No

### SECTION 15: OTHER REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

### **SECTION 16: OTHER INFORMATION**

References: Full text of H AND R-Statements. Not Applicable Other Special Considerations: Not available

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