

**AERCHEM INC.**  
**400 W. 7th Street, Suite 112**  
**Bloomington, IN 47404**

Telephone: 812.334.9996

Fax: 812.334.1960

Emergency: 800.424.9300

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**SECTION 1: CHEMICAL PRODUCT IDENTIFICATION**

**Common Name/Trade Name:**

Glutathione

**Commercial Name:**

Not available

**Chemical Family:**

Not available

**Chemical Formula:**

C10H17N3O6S

**Supplier:**

AerChem, Inc.  
400 W. 7Th St. Suite112  
Bloomington, IN 47404

**CAS No.:**

70-18-8

**RTECS:**

MCO556000

**TSCA:**

On the TSCA list.

**In Case of Emergency:**

Chemtrec: 800-424-9300

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**SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS**

**Name:**

Glutathione

**CAS No.:**

70-18-8

**% by Weight:**

100

**Toxicological Data on Ingredients:**

Glutathione:

ORAL (LD50): Acute: 5000 mg/kg (Mouse)

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**SECTION 3: HAZARDS IDENTIFICATION**

**Potential Acute Health Effects:**

Slightly dangerous in case of eye contact (irritant), of ingestion, of inhalation.

**Potential Chronic Health Effects:**

Slightly dangerous to dangerous in case of eye contact (irriatnt), of ingestion, of inhalation.

CARCINOGENIC EFFECTS: Not Available.

MUTAGENIC EFFECTS: Not Available.

TERTOGENIC EFFECTS: Not Available.

Toxicity of theproduct to the reproductive system: Not available.

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**SECTION 4: FIRST AID MEASURES**

**Eye Contact:**

Check for and remove any contact lenses. IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. COLD water may be used. DO NOT use an eye ointment. Seek medical attention.

**Skin Contact:**

NO known EFFECT according to our database.

**Serious Skin Contact:**

No additional information.

**Inhalation:**

Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

**Serious Inhalation:**

No additional information.

**Ingestion:**

Remove dentures if any. Have conscious person drink several glasses of water or milk. INDUCE VOMITING by sticking finger in throat. Lower the head so that the vomit will not reenter the mouth and throat. NEVER give an unconscious person anything to ingest. Seek medical attention.

**Serious Ingestion:**

No additional information.

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**SECTION 5: FIRE AND EXPLOSION DATA**

**Flammability of the Product:**

Combustable

**Auto-Ignition Temperature:**

Not available

**Flash Points:**

Not available

**Flammable Limits:**

Not available

**Products of Combustion:**

These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...)

**Fire Hazards in Presence of Various Substances:**

No specific information is available in our database regarding the flammability of this product in presence of various materials.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available

Risks of explosion of the product in presence of static discharge: Not available

No specific information is available in our database regarding the product's risks of explosion in the presence of various materials.

**Fire Fighting Media and Instructions:**

SMALL FIRE: Use DRY chemicals, CO<sub>2</sub>, water spray or foam.

LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.

**Special Remarks on Fire Hazards:**

Fine powder forms flammable and explosive mixtures in air.

**Special Remarks on Explosion Hazards:**

No additional remark

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Small Spill:**

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:**

Our database contains no additional information in case of a spill and/or leak of the product. Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

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**SECTION 7: HANDLING AND STORAGE**

**Precautions:**

Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. DO NOT breathe dust. Avoid contact with eyes.

Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible.

**Storage:**

Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Engineering Controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limits.

**Personal Protection:**

Splash goggles. Lab coat. Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.

Gloves (impervious). Wear appropriate respirator when ventilation is inadequate.

**Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient, consult a specialist BEFORE handling this product.

**Exposure Limits:**

Not available.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State and Appearance:**

Solid

**Odor:**

Not available

**Molecular Weight:**

307.33

**Taste:**

Not available

**pH (1% soln/water):**

Not available

**Color:**

Not available

**Boiling Point:**

Decomposes

**Melting Point:**

192°C (377.6°F)

**Critical Temperature:**

Not available

**Specific Gravity:**

Not available

**Vapor Pressure:**

Not available

**Vapor Density:**

Not available

**Volatility:**

Not available

**Odor Threshold:**

Not available

**Water/Oil Dist. Coeff.:**

Not available

**Ionicity (in Water):**

Not available

**Dispersion Properties:**

See solubility in water.

**Solubility:**

Partially soluble in cold water, hot water.

Insoluble in methanol, diethyl ether.

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**SECTION 10: STABILITY AND REACTIVITY DATA****Stability:**

The product is stable

**Instability Temperature:**

Not available

**Conditions of Instability:**

No additional remark.

**Incompatibility With Various Substances:**

No specific information is available in our database regarding the reactivity of this material in presence of various other materials.

**Corrosivity:**

Non-corrosive in presence of glass.

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**Special remarks on Reactivity:**

No additional remarks.

**Special Remarks on Corrosivity:**

No additional remark.

**Polymerization:**

No

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**SECTION 11: TOXICOLOGICAL INFORMATION****Routes of Entry:**

Ingestion. Inhalation.

**Toxicity to Animals:**

Acute oral toxicity (LD50): 166 mg/kg (Rat).

Acute dermal toxicity (LD50): 1500 mg/kg (Rat).

**Chronic Effects on Humans:**

The substance is toxic to blood, kidneys, lungs, the nervous system, mucous membranes. Toxicity of the product to the reproductive system: Not available.

**Other Toxic Effects on Humans:**

Very dangerous in case of ingestion.

Slightly dangerous in case of skin contact (irritant), of eye contact (irritant), of inhalation.

Very slightly to slightly dangerous in case of skin contact (permeator).

**Special Remarks on Toxicity to Animals:**

No additional remark.

**Special Remarks on Chronic Effects on Humans:**

No additional remark.

**Special Remarks on Other Toxic Effects on Humans:**

No additional remarks.

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**SECTION 12: ECOLOGICAL INFORMATION****Ecotoxicity:**

Not available.

**BOD5 and COD:**

Not available.

**Products of Biodegradation:**

These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>..)

**Toxicity of the Products of Biodegradation:**

The products of degradation are more toxic.

**Special Remarks on the Products of Biodegradation:**

No additional remark.

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**SECTION 13: DISPOSAL CONSIDERATIONS****Water Disposal:**

Recycle to process, if possible. Consult your local or regional authorities.

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**SECTION 14: TRANSPORT INFORMATION****DOT Classification:**

Not a DOT controlled material (United States).

**Identification:**

Not applicable (PIN and PG).

**Special Provisions for Transport:**

Not applicable.

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