



INTATRADE
MATERIAL SAFETY DATA SHEET
according to 1907/2006/EC, Article 31

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1. IDENTIFICATION OF SUBSTANCE AND OF THE COMPANY

Product name: **Glutathione reduced**
Product code: PS00347
Company: INTATRADE Chemicals GmbH
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2. HAZARDS IDENTIFICATION

Hazard designation void
Information pertaining to particular
Dangers for man and environment void
GHS label elements void

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization
Designation: Glutathione reduced
CAS-No.: 70-18-8
EC-No.: 200-725-4

4. FIRST AID MEASURES

After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
Seek immediate medical advice.
After skin contact Instantly wash with water and soap and rinse thoroughly.
Seek immediate medical advice.
After eye contact Rinse opened eye for several minutes under running water. Then consult doctor.
After swallowing Seek immediate medical advice.

5. FIRE FIGHTING MEASURES

Suitable extinguishing agents: CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
Special hazards caused by the material, its products of combustion or flue gases: Can be released in case of fire: Carbon monoxide and carbon dioxide, Nitrogen oxides (NO_x), Sulphur oxides (SO_x)
Protective equipment: Wear self-contained breathing apparatus.
Wear full protective suit.

6. ACCIDENTAL RELEASE MEASURES

Person-related safety precautions:	Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation
Measures for environmental protection:	Do not allow material to be released to the environment without proper governmental permits.
Measures for cleaning/collecting:	Dispose of contaminated material as waste according to item 13.
Additional information:	See Section 7 for information on safe handling See section 8 for information on personal protection equipment. See Section 13 for information on disposal.

7. HANDLING AND STORAGE

Handling	
Information for safe handling:	Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace.
Information about protection against explosions and fires:	Keep ignition sources away - Do not smoke.
Storage	
Requirements to be met by storerooms and containers:	Refrigerate
Information about storage in one common storage facility:	Store away from oxidizing agents.
Further information about storage conditions:	Keep container tightly sealed. Store in cool, dry conditions in well sealed containers.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Additional information about design of technical systems:	Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
Components with critical values that require monitoring at the workplace:	Not required.
Personal protective equipment	
General protective and hygienic measures:	The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work.
Breathing equipment:	Use breathing protection with high concentrations.
Protection of hands:	Check protective gloves prior to each use for their proper condition.
Material of gloves:	The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Eye protection:	Safety glasses
Body protection:	Protective work clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information	
Form:	Powder
Colour:	White
Smell:	Not determined
Change in condition	
Melting point/Melting range:	192-195°C (dec)

Boiling point/Boiling range:	Not determined
Sublimation temperature/start:	Not determined
Flash point:	Not applicable
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Danger of explosion:	Product is not explosive.
Critical values for explosion:	
Lower:	Not determined
Upper:	Not determined
Steam pressure:	Not determined
Density:	Not determined
Solubility in water:	Soluble

10. STABILITY AND REACTIVITY

Thermal decomposition / conditions to be avoided:	No decomposition if used and stored according to specifications.
Materials to be avoided:	Oxidizing agents
Dangerous reactions:	No dangerous reactions known
Dangerous products of decomposition:	Carbon monoxide and carbon dioxide, Nitrogen oxides (NO _x), Sulphur oxides (SO _x)

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	
LD/LC50 values that are relevant for classification:	Oral LD50 5 gm/kg (mouse)
Primary irritant effect:	
on the skin:	May cause irritation
on the eye:	May cause irritation
Sensitization:	No sensitizing effect known.
Other information (about experimental toxicology):	Reproductive effects have been observed on tests with laboratory animals. Mutagenic effects have been observed on tests with bacteria. Mutagenic effects have been observed with human fibroblast. Mutagenic effects have been observed on tests with laboratory animals.
Additional toxicological information:	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12. ECOLOGICAL INFORMATION

Additional ecological information	
General notes:	Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. Do not allow material to be released to the environment without proper governmental permits.

13. DISPOSAL CONSIDERATIONS

Product	
Recommendation:	Consult state, local or national regulations for proper disposal. Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations.
Uncleaned packagings	
Recommendation:	Disposal must be made according to official regulations.
Recommended cleaning agent:	Water, if necessary with cleaning agent.

14. TRANSPORT INFORMATION

Land transport ADR/RID and
GGVS/GGVE (cross-border/domestic)
ADR/RID-GGVS/E Class: None

Maritime transport IMDG/GGVSea:
IMDG/GGVSea Class: None
Marine pollutant: No

Air transport ICAO-TI and IATA-DGR:
ICAO/IATA Class: None

Transport/Additional information: Not dangerous according to the above specifications.

15. REGULATORY INFORMATION

Designation according to EC
guidelines: Observe the normal safety regulations when handling chemicals
The product is not subject to identification regulations under EC
Directives and the Ordinance on Hazardous Materials (GefStoffV).

National regulations
Information about limitation of use: For use only by technically qualified individuals.
Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

16. OTHER INFORMATION

Warranty

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. Intatrade Chemicals GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.