

Reviewed on 12/30/2015

1 Identification

- · Product identifier
- · Trade name: Thioglycolic Acid Sodium Salt, Bacteriological Grade
- Article number: 102933
- CAS Number:
- 367-51-1 • **EC number:**
- 206-696-4
- Molecular Formula C₂H₃O₂SNa
- Molecular Weight 114.1 g/mol
- · Application of the substance / the mixture Research use only.
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier: MP Biomedicals, LLC 29525 Fountain Parkway Solon, OH 44139 United States www.mpbio.com
- *Information department: Product safety department* • *Emergency telephone number:* CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

· Classification of the substance or mixture



Acute Toxicity (Oral) - Category 4 Skin Irritation - Category 2 Eye Irritation - Category 2 Specific Target Organ Toxicity - Single Exposure -Category 3 H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

· Label elements

- · GHS label elements
- *The substance is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms*



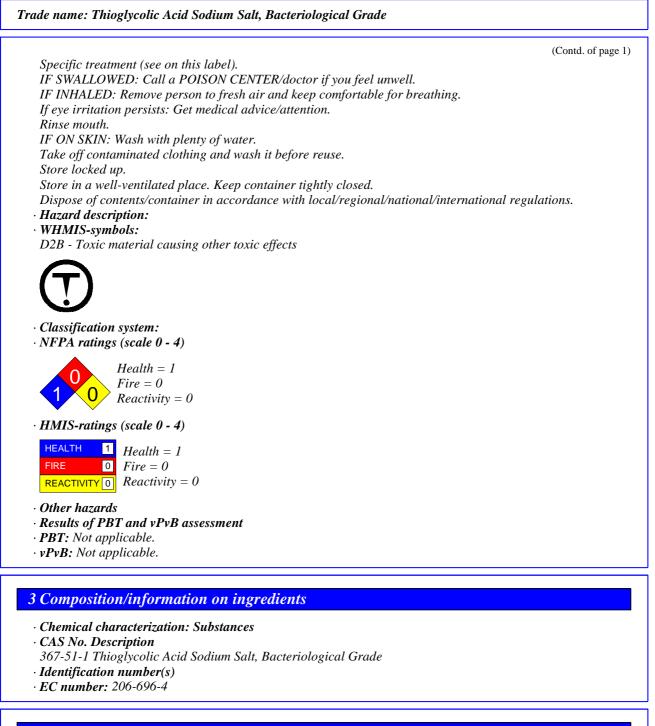
Signal word Warning
Hazard statements
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
Precautionary statements
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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4 First-aid measures

- · Description of first aid measures
- · General information:
- Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. • *After swallowing: Immediately call a doctor.*

· Information for doctor:

• Most important symptoms and effects, both acute and delayed No further relevant information available.

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• *Indication of any immediate medical attention and special treatment needed No further relevant information available.*

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- *Methods and material for containment and cleaning up:* Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.
- · Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage: 2 8 °C
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:
- Store in nitrogen.

Desiccate.

Keep receptacle tightly sealed.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see item 7.

- · Control parameters
- · Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes and skin.

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• Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

• Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· 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.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection:



Tightly sealed goggles

Information on basic physical and General Information Appearance:	chemical properties	
Form:	Powder	
Color:	White	
Odor:	Indeterminate	
Odor threshold:	Not determined.	
pH-value:	Not applicable.	
Change in condition		
Melting point/Melting range:	> 300 °C	
Boiling point/Boiling range:	Undetermined.	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Product is not flammable.	
Ignition temperature:		
Decomposition temperature:	Not determined.	
Auto igniting:	Not determined.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not applicable.	
Density:	Not determined.	
Relative density	Not determined.	

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· Vapor density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with	-	
Water at 20 °C:	114 g/l	
· Partition coefficient (n-octanol/wat	t er): Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
• Other information	No further relevant information available.	

10 Stability and reactivity

· Reactivity No further relevant information available.

· Chemical stability

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- Acute toxicity:
- · LD/LC50 values that are relevant for classification:

Oral LD50 504 mg/kg (mouse)

- · Primary irritant effect:
- on the skin: Irritant to skin and mucous membranes.

• on the eye: Irritating effect.

- · Sensitization: No sensitizing effects known.
- Additional toxicological information:

· Carcinogenic categories

- · IARC (International Agency for Research on Cancer) Substance is not listed.
- · NTP (National Toxicology Program) Substance is not listed.
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

12 Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:
- Water hazard class 1 (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.

• **vPvB:** Not applicable.

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 $\cdot \textit{Other adverse effects}$ No further relevant information available.

13 Disposal considerations

· Waste treatment methods

• *Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.*

· Uncleaned packagings:

· Recommendation: Disposal must be made according to official regulations.

• *Recommended cleansing agent:* Water, if necessary with cleansing agents.

UN-Number	
DOT, TDG, IMDG, IATA	UN3335
UN proper shipping name	
DOT, IMDG	Aviation regulated solid, n.o.s.
TDG	3335 Aviation regulated solid, n.o.s.
IATA	Aviation regulated solid, n.o.s. (Thioglycolic Acid Sodium Sal Bacteriological Grade)
Transport hazard class(es)	
DOT, IATA	
9	
Label	9
TDG, IMDG	
AIN.	
Class Label	9 Miscellaneous dangerous substances and articles 9
	9
Packing group DOT, TDG, IMDG, IATA	III
Environmental hazards:	Not applicable.
Special precautions for user	Warning: Miscellaneous dangerous substances and articles
Transport in bulk according to Annex II of	
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 400 kg
	On cargo aircraft only: 400 kg
TDG	
Excepted quantities (EQ)	NOT SUBJECT TO ADR
IMDG	
Limited quantities (LQ)	-

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• Excepted quantities (EQ) • UN "Model Regulation":

Code: -

UN 3335 AVIATION REGULATED SOLID, N.O.S., 9, III

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

- Section 355 (extremely hazardous substances): Substance is not listed.
- · Section 313 (Specific toxic chemical listings): Substance is not listed.
- · TSCA (Toxic Substances Control Act): Substance is listed.
- · Proposition 65
- · Chemicals known to cause cancer: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.
- · Carcinogenic categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- TLV (Threshold Limit Value established by ACGIH) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- · Canadian substance listings:
- · Canadian Domestic Substances List (DSL) Substance is listed.
- · Canadian Ingredient Disclosure list (limit 0.1%) Substance is not listed.
- · Canadian Ingredient Disclosure list (limit 1%) Substance is not listed.
- · GHS label elements
- The substance is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



· Signal word Warning · Hazard statements Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. · Precautionary statements Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Specific treatment (see on this label). IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If eye irritation persists: Get medical advice/attention. Rinse mouth. IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/container in accordance with local/regional/national/international regulations. (Contd. on page 8)

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· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing MSDS: Product safety department

· Date of preparation / last revision 12/30/2015 / -· Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health Acute Toxicity (Oral) - Category 4: Acute toxicity, Hazard Category 4 Skin Irritation - Category 2: Skin corrosion/irritation, Hazard Category 2 Eye Irritation - Category 2: Serious eye damage/eye irritation, Hazard Category 2 Specific Target Organ Toxicity - Single Exposure - Category 3: Specific target organ toxicity - Single exposure, Hazard Category 3