

Revision Date 2022-08-11

Version 1

SAFETY DATA SHEET

| 1. IDENTIFICATION | | | |
|---------------------|--|--|--|
| Product Name | Giemsa Stain Solution, Wolbach | | |
| Product Code | GM1899, GM8200, GM8201 | | |
| Recommended Use | For laboratory, scientific, R&D or manufacturing use. | | |
| Company | Cancer Diagnostics, Inc. 116 Page Point Circle Durham, NC 27703 Tel. (877) 846-5393 | | |
| Emergency Telephone | Call CHEMTREC 1-800-424-9300 | | |

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| Acute toxicity - Oral | Category 3 |
|--|------------|
| Acute toxicity - Dermal | Category 3 |
| Acute toxicity - Inhalation (Dusts/Mists) | Category 2 |
| Specific target organ toxicity (single exposure) | Category 1 |
| Flammable liquids | Category 2 |

Label elements

Signal word

Danger

Hazard statements

Toxic if swallowed. Toxic in contact with skin. Fatal if inhaled. Causes damage to organs. Highly flammable liquid and vapor.



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wear respiratory protection. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep

cool.

Precautionary Statements - Response

IF exposed: Call a POISON CENTER or doctor/physician.

Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

In case of fire: Use CO2, dry chemical, or foam for extinction.

Precautionary Statements - Storage

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Weight-% |
|----------------|------------|----------|
| Methyl alcohol | 67-56-1 | 45-55 |
| Glycerol | 56-81-5 | 45-55 |
| Giemsa stain | 51811-82-6 | <0.5 |

4. FIRST AID MEASURES

Description of first aid measures

| Eye contact | Immediately flush with plenty of water for at least 15 minutes, separating eyelids occasionally. Remove contact lenses if present. Get immediate medical attention. |
|----------------------------------|---|
| Skin contact | Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Immediate medical attention is required. |
| Inhalation | Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. |
| Ingestion | Rinse mouth. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Immediate medical attention is required. |
| Most important symptoms and effe | ects, both acute and delayed |

Symptoms If swallowed or inhaled, causes irritation. Intoxicant. May cause headache, drowsiness, nausea, vomiting, blurred vision, blindness, coma, and death.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Flammable. Keep product and empty container away from heat and sources of ignition.

Hazardous combustion products

Carbon oxides.

Protective equipment and precautions for firefighters

Firefighters should wear self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive pressure mode.

| NFPA H | lealth hazards 2 | Flammability 3 | Instability 0 | Physical and Chemical Properties - |
|---|----------------------|--|--|---------------------------------------|
| | 6. ACCI | DENTAL RELEASI | E MEASURES | |
| Personal precautions, pro | otective equipment a | nd emergency procedu | ires_ | |
| Personal precautions Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Take precautionary measures against static discharges. | | | | |
| Environmental precautior | ns Prevent er | Prevent entry into waterways, sewers, basements or confined areas. | | |
| Methods and material for containment and cleaning up | | | | |
| Methods for containment | Prevent fu | Prevent further leakage or spillage if safe to do so. | | |
| Methods for cleaning up | Absorb sp | Absorb spill with inert material, scoop up and containerize for disposal. | | |
| | 7. | HANDLING AND S | TORAGE | |
| Precautions for safe hand | • | nal protective equipmen accordance with good ir | t as required idustrial hygiene and saf | ety practice. |
| Storage Conditions | Flammabl | Keep containers tightly closed in a dry, cool and well-ventilated place. Store in an approved Flammable Liquids storage area. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). | | |
| Incompatible materials | Strong oxi | dizing agents. Acids. Str | ong reducing agents. Ac | id anhydrides. Acid chlorides. |
| | | | | |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|----------------|---------------|---|-----------------------------|
| Methyl alcohol | STEL: 250 ppm | TWA: 200 ppm | IDLH: 6000 ppm |
| 67-56-1 | TWA: 200 ppm | TWA: 260 mg/m ³ | TWA: 200 ppm |
| | Skin | (vacated) TWA: 200 ppm | TWA: 260 mg/m ³ |
| | | (vacated) TWA: 260 mg/m ³ | STEL: 250 ppm |
| | | (vacated) STEL: 250 ppm | STEL: 325 mg/m ³ |
| | | (vacated) STEL: 325 mg/m ³ | ç |
| | | (vacated) Skin | |
| Glycerol | - | TWA: 15 mg/m ³ mist, total | - |
| 56-81-5 | | particulate | |
| | | TWA: 5 mg/m ³ mist, respirable | |
| | | fraction | |
| | | (vacated) TWA: 10 mg/m ³ mist, | |
| | | total particulate | |
| | | (vacated) TWA: 5 mg/m ³ mist, | |
| | | respirable fraction | |

Appropriate engineering controls

Engineering Controls

Emergency showers, eyewash stations, ventilation systems.

Individual protection measures, such as personal protective equipment

| Eye/face protection | Tight sealing safety goggles. |
|--------------------------|---|
| Skin and body protection | Wear protective gloves and protective clothing. |

| Respiratory protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
|--------------------------------|---|
| General Hygiene Considerations | Handle in accordance with good industrial hygiene and safety practice. |

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| Physical state Appearance Odor Odor threshold | Liquid Dark blue slightly viscous Slight smell of alcohol No information available |
|--|---|
| рН | No information available |
| Melting point / freezing point | No information available |
| Boiling point / boiling range | No information available |
| Flash point | No information available |
| Evaporation rate | No information available |
| Flammability (solid, gas) | No information available |
| Flammability Limit in Air | |
| Upper flammability limit: | No information available |
| Lower flammability limit: | No information available |
| Vapor pressure | No information available |
| Vapor density | No information available |
| Relative density | No information available |
| Water solubility | Miscible with water |
| Solubility in other solvents | No information available |
| Partition coefficient | No information available |
| Autoignition temperature | No information available |
| Decomposition temperature | No information available |
| Kinematic viscosity | No information available |

10. STABILITY AND REACTIVITY

| Stability | Stable under recommended storage conditions. |
|------------------------------------|--|
| Possibility of Hazardous Reactions | None under normal processing. |
| Conditions to avoid | Extremes of temperature and direct sunlight. |
| Incompatible materials | Strong oxidizing agents. Acids. Strong reducing agents. Acid anhydrides. Acid chlorides. |

Hazardous Decomposition Products Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| Inhalation | Toxic by inhalation. | |
|--------------|-----------------------------|--|
| Eye contact | Avoid contact with eyes. | |
| Skin contact | Toxic in contact with skin. | |
| Ingestion | Toxic if swallowed. | |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------------------|---------------------|------------------------|--|
| Methyl alcohol 67-56-1 | = 6200 mg/kg (Rat) | = 15800 mg/kg (Rabbit) | = 22500 ppm (Rat)8 h = 64000 ppm (Rat)4 h |
| Glycerol 56-81-5 | = 12600 mg/kg (Rat) | > 10 g/kg (Rabbit) | > 570 mg/m³ (Rat)1 h |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| Skin corrosion/irritation | No information available. |
|-----------------------------------|--|
| Serious eye damage/eye irritation | No information available. |
| Irritation | No information available. |
| Sensitization | No information available. |
| Germ cell mutagenicity | No information available. |
| Carcinogenicity | This chemical does not contain any carcinogens or potential carcinogens as listed by |
| STOT - single exposure | ACGIH, OSHA, IARC or NTP - Causes damage to target organs |

12. ECOLOGICAL INFORMATION

Ecotoxicity

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---------------------------|----------------------|---|--------------------------------------|
| Glycerol 56-81-5 | - | 51 - 57: 96 h Oncorhynchus mykiss mL/L LC50 static | 500: 24 h Daphnia magna mg/L EC50 |
| Methyl alcohol 67-56-1 | - | 13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-through 18 - 20: 96 h Oncorhynchus mykiss mL/L LC50 static 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 28200: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static | - |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

| Chemical Name | Partition coefficient |
|---------------------------|-----------------------|
| Methyl alcohol 67-56-1 | -0.77 |
| Glycerol 56-81-5 | -1.76 |

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

| Disposal of wastes | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
|------------------------|---|
| Contaminated packaging | Do not reuse container. Emptied containers may contain residue. Continue to follow label |

Do not reuse container. Emptied containers may contain residue. Continue to follow label warnings after container is emptied.

| Chemical Name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|----------------|------|---------------------------|------------------------|------------------------|
| Methyl alcohol | - | Included in waste stream: | - | U154 |

67-56-1 F039

| Methyl alcohol Toxic | Chemical Name | California Hazardous Waste Status |
|----------------------|---------------------------|-----------------------------------|
| 67-56-1 Ignitable | Methyl alcohol 67-56-1 | Toxic Ignitable |

14. TRANSPORT INFORMATION

Transportation information is provided as a general reference only and may not be applicable in all situations. This information applies to non-bulk shipments only. Per 49 CFR §173.22, it is the shipper's responsibility to ensure that all materials are properly packaged, classified and labeled prior to shipment.

| DOT UN/ID no. Proper shipping name Hazard Class Packing Group | 1230 Methanol 3 II |
|--|----------------------------------|
| IATA UN/ID no. Proper shipping name Hazard Class Packing Group | 1230 Methanol 3, 6.1 II |

15. REGULATORY INFORMATION

US Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name | SARA 313 - Threshold Values % |
|-----------------------------------|-------------------------------|
| Methyl alcohol - 67-56-1 | 1.0 |
| SARA 311/312 Hazard Categories | |
| Acute health hazard | Yes |
| Chronic Health Hazard | Yes |
| Fire hazard | Yes |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

<u>CERCLA</u>

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|----------------|--------------------------|----------------|--------------------------|
| Methyl alcohol | 5000 lb | - | RQ 5000 lb final RQ |
| 67-56-1 | | | RQ 2270 kg final RQ |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

| Chemical Name | California Proposition 65 |
|--------------------------|---------------------------|
| Methyl alcohol - 67-56-1 | Developmental |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---------------------------|------------|---------------|--------------|
| Methyl alcohol 67-56-1 | Х | Х | Х |
| Glycerol 56-81-5 | Х | Х | Х |

16. OTHER INFORMATION

Prepared By Revision Date Disclaimer

CDI Regulatory Affairs (Email: compliance@cancerdiagnostics.com) 2022-08-11

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End of Safety Data Sheet