

MATERIAL SAFETY DATA SHEET

Chemical Product

Product Name: GIEMSA'S STAINING SOLUTION

CAS#: 51811-82-6

Synonym: Not Applicable.

Chemical Name: Giemsa's Staining Solution

Chemical Formula: Not Applicable.

Composition and Information on Ingredients

Name	S.K.U	% by Weight
GIEMSA'S STAINING SOLUTION	GCS-5928	100
Glycerin	56-81-5	60.9
Methyl alcohol	67-56-1	38.3
Azure II	37247-10-2	0.16
Azure II eosinate	53092-85-6	0.6

Hazards Identification

Potential Acute Health Effects:

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available.

TERATOGENIC

EFFECTS: Not available. DEVELOPMENTAL TOXICITY: PROVEN [Methyl alcohol] the substance is toxic to the nervous system, the reproductive system. Repeated or prolonged exposure to the substance can produce target organs damage.

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:

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious Skin Contact: Not available.

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

Serious Inhalation: Not available.

Ingestion:

Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available.

Fire and Explosion Data

Flammability of the Product: Flammable.

Auto-Ignition Temperature: The lowest known value is 393°C (739.4°F) (Glycerin).

Flash Points: The lowest known value is CLOSED CUP: 12°C (53.6°F). (Methyl

alcohol) Flammable Limits: The greatest known range is LOWER: 6% UPPER:

36.5% (Methyl alcohol) Products of Combustion: These products are carbon oxides (CO, CO₂).

Fire Hazards in Presence of Various Substances:

Highly flammable in presence of open flames and sparks, of heat, of combustible materials. Flammable in presence of oxidizing 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. Explosive in presence of heat.

Fire Fighting Media and Instructions:

Flammable liquid, soluble or dispersed in water. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam, water spray or fog.

Special Remarks on Fire Hazards:

Explosive in the form of vapor when exposed to heat or flame. Vapor may travel considerable distance to source of ignition and flash back. When heated to decomposition, it emits acrid smoke and irritating fumes. CAUTION: MAY BURN WITH NEAR INVISIBLE FLAME (Methyl alcohol)

Special Remarks on Explosion Hazards: Not available.

Accidental Release Measures

Small Spill:

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill:

Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Handling and Storage

Precautions:

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapour/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment if ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage:

Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. A refrigerated room would be preferable for materials with a flash point lower than 37.8°C (100°F).

Exposure Controls/Personal Protection

Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection:

Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

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:

Glycerin TWA: 10 (mg/m³) from OSHA Methyl alcohol TWA: 200 STEL: 250 (ppm) from ACGIH (TLV) [1995] TWA: 262 STEL: 328 (mg/m³) from ACGIH [1995] Consult local authorities for acceptable exposure limits.

Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor	: Not available.
Taste	: Not available.
Molecular Weight	: Not available.
Color	: Not available.
pH (1% soln/water)	: Neutral.
Boiling Point	: The lowest known value is 64.5°C (148.1°F) (Methyl alcohol).
Melting Point	: May start to solidify at 17.9°C (64.2°F) based on data for: Glycerin.
Critical Temperature	: Not available.
Specific Gravity	: Weighted average: -26.75°C (-16.1°F)
Vapor Pressure	: Not available.
20°C) (Methyl alcohol).	: Weighted average: 1.04 (Water = 1)
Vapor Density	: The highest known value is 97.68 mm of Hg (@
Weighted average:	: The highest known value is 3.17 (Air = 1) (Glycerin).
Volatility	: 2.37 (Air = 1)
Odor Threshold	: Not available.
alcohol)	: The highest known value is 160 ppm (Methyl
Water/Oil Dist. Coeff.	: Not available.
Ionicity (in Water)	: Not available.
Dispersion Properties	: Is not dispersed in methanol, diethyl ether. See solubility in water, methanol, and diethyl ether.
Solubility	: Easily soluble in cold water, hot water, methanol,
diethyl ether.	

Stability and Reactivity Data

Stability: The product is stable.

Instability

Temperature:

Not available.

Conditions of

Instability:

Not available.

Incompatibility with various substances: Not available.

Corrosivity: Non-corrosive in
presence of glass.

Special Remarks on

Reactivity: Not available.

Special Remarks on

Corrosivity: Not available.

Polymerization: No.

Toxicological Information

Routes of Entry: Eye contact. Inhalation. Ingestion.

Toxicity to Animals:

WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR

EXPOSURE. Acute oral toxicity (LD50): 5628 mg/kg [Rat.]. (Methyl alcohol). Acute dermal toxicity (LD50): 15800 mg/kg [Rabbit.]. (Methyl alcohol). Acute toxicity of the vapor (LC50): 64000 ppm 4 hour(s) [Rat.]. (Methyl alcohol).

Chronic Effects on Humans:

DEVELOPMENTAL TOXICITY: PROVEN [Methyl alcohol] the substance is toxic to the nervous system, the reproductive system.

Other Toxic Effects on Humans:

Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:

0040 Passes through the placental barrier. May be fatal or cause blindness if swallowed. (Methyl alcohol)

Special Remarks on other Toxic Effects on Humans: Narcotic. (Methyl alcohol)

Toxicological Data on Ingredients: Methyl alcohol: ORAL (LD50): Acute: 5628 mg/kg [Rat.].
DERMAL (LD50): Acute: 15800 mg/kg [Rabbit.]. VAPOR (LC50): Acute: 64000 ppm 4
hour(s) [Rat.].

Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

Disposal Considerations

Waste Disposal:

Transformation Information

Land transport (ADR-RID)

Proper shipping name: METHANOL

UN N°: 1230

H.I. nr: 336

ADR - Class: 3

Labelling - Transport: 3: Flammable liquid. 6.1: Toxic substances

ADR - Group: II

Sea transport

(IMDG) [English

only] Proper

shipping name:

METHANOL

UN N°: 1230

IMO-IMDG - Class or division: 3: Flammable liquid. (6.1: Toxic substances.)

IMO-IMDG - Packing group: II

Air transport (ICAO-IATA)

[English only] Proper

shipping name:

METHANOL

UN N°: 1230

IATA - Class or division: 3: Flammable liquid. (6.1: Toxic substances.)

IATA - Packing group: II

Other Regulatory Information

Federal and State Regulations:

Pennsylvania RTK: Glycerin; Methyl alcohol Massachusetts RTK: Methyl alcohol TSCA 8(b) inventory: Glycerin; Methyl alcohol SARA 313 toxic chemical notification and release reporting: Methyl alcohol CERCLA: Hazardous substances: Methyl alcohol;

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada): CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC): R11- Highly flammable. R36/38- Irritating to eyes and skin.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Additional Information

References: Not available.

Other Special Considerations: Not available.

Disclaimer:

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