SECTION 1: Identification of the substance/mixture and of the company

1.1 Product identifier

1.2 Product Name: **Gram Stains**

1.3 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/preparation: Colorimetric reagent for the in-vitro quantitative determination of urea in human serum, plasma and urine on both manual and automated systems.

1.4 Details of the supplier of the safety data sheet

- Name of Manufacturer: Arena BioScien, SEA
- Address of Manufacturer: Block 5, Street 9 Ismailia free zone. Ismailia- Egypt
- Telephone: +202 21813500/ +201113102057
- Email: admin@arenabioscientific.com

SECTION 2 Hazards identification

2.1 Classification of the substance or mixture

Classification (29 CFR 1910.1200)

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]
  Not classified as hazardous for supply
- Classification (67/548/EEC, 1999/45/EC) (OSHA 29 CFR 1910.1200)
  Not classified as hazardous for supply

2.2 Label elements

- Signal Word: None
- Symbols: None
- Hazard phrases: None
- Precautionary Phrases:
  Keep container tightly closed.
  Do not breathe dust.
  Avoid contact with eyes, skin, or clothing.

SECTION 3 Composition/information on ingredients

3.1 Substances

INGREDIENT	g/l
Solution 1	Methyl Violet 6 B Distilled water
Solution 2	Lugol's iodide: Potassium iodine distilled water iodine
Solution 3	Decolorizer, absolute ethyl alcohol or acetone
Solution 4	Counterstain, neutral red.

3.2 Mixtures

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 4 First aid measures

4.1 Description of first aid measures

General notes:

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation:

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact:
Wash with plenty of soap and water.
Following eye contact:
Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.
Following ingestion:
Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.
4.2Most important symptoms and effects, both acute and delayed
Narcotic effects.
4.3 Indication of any immediate medical attention and special treatment needed
None

SECTION 5 Fire-fighting measures

- 5.1 Extinguishing media

Suitable extinguishing media:

Water spray, BC-powder, Carbon dioxide (CO2)

Unsuitable extinguishing media:

Water jet

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

Hazardous combustion products:

Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental Precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and material for containment and cleaning up
Sweep up and shovel into suitable containers for disposal. Avoid dust formation. **Reference to other sections.** For disposal see Section 13.

6.4 Reference to other sections
- Hazardous combustion products: see section 5.
- Personal protective equipment: see section 8.
- Incompatible materials: see section 10.
- Disposal considerations: see section 13.

SECTION 7 Handling and storage

7.1 Precautions for safe handling

- Avoid contact with skin and eyes.
- Avoid inhalation of vapor or mist.
- Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended Storage Temperature: On receipt store between 10-30°C

Incompatible substances or mixtures: Observe hints for combined storage.

Consideration of other advice: Ventilation requirements (Use local and general ventilation. Specific designs for storage rooms or vessels recommended storage temperature: 15 – 25 °C Specific end use(s)).

SECTION 8 Exposure controls/personal protection

8.1 Control parameters

- Exposure above the recommended occupational exposure limit (OEL) may cause adverse health effects

8.2 Exposure controls

- Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P1 (filters at least 80 % of airborne particles, colour code: White).
- Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
- Wear safety glasses approved to standard for ANSI Z87 or EN 166.
- Wear suitable protective clothing in accordance with good chemical hygiene practices.
-


Gloves


Safety Glasses


Lab Coat

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties
Physical state: liquid
Colou:r Refer SDS of S012(Grams Crystal violet), S013 (Grams Iodine),S032 Grams Decolourizer and S027 Safranine 0.5% w/v (Grams's Counterstain)for respective appearance.
Odour: Not applicable
Melting point/freezing point: not determined
Boiling point or initial boiling point and boiling range: not determined
Flammability: flammable liquid in accordance with GHS criteria Lower and upper explosion limit not determined
Flash point: not determined
Auto-ignition temperature: not determined
Decomposition temperatur:e not relevant
pH (value): not determined
Kinematic viscosity: not determined
Solubility(ies): not determined
Partition coefficient :Partition coefficient n-octanol/water (log value)--- this information is not available
Vapour pressure: not determine
Density: not determined
Relative vapour density: information on this property is not available
Particle characteristics: not relevant (liquid)
9.2 Other information
Information with regard to physical hazard classes: there is no additional information
Other safety: characteristics there is no additional information

SECTION 10 Stability and reactivity

10.1 Reactivity

- No data available

10.2 Chemical stability
No data available

10.3 Conditions to avoid
Heat, flames and sparks. Protect from direct sunlight

10.4 Incompatible materials
Strong oxidizing agents.

10.5 Hazardous combustion products: see section 5

SECTION 11 Toxicological information

11.1 Information on toxicological effects

- Acute toxicity: Low order of acute toxicity.

Oral LD50 (rat) > 2000 mg/kg.
Dermal LD50 (rabbit) > 2000 mg/kg.
Inhalation LC50 (rat) > 20 mg/litre/4h.

- Contact with skin: No data available
- Contact with eyes: No data available
- Ingestion: No data available
- Inhalation: No data available
- Carcinogenicity: No evidence of carcinogenic effects.
- Mutagenicity: No evidence of mutagenic effects.
- Teratogenicity: No information available

SECTION 12 Ecological information

12.1 Toxicity
- No data available

12.2 Persistence and degradability
- Readily Biodegradable

12.3 Bioaccumulation Potential
- No information available

12.4 Mobility in soil
- No information available

12.5 Results of PBT and vPvB assessment

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

12.6 Other Adverse Effects
- To the best of our knowledge, the properties of this material have not been fully evaluated.
- On available data, substance is not harmful to the environment.

SECTION 13 Disposal considerations

13.1 Waste treatment methods

Contact a licensed professional waste disposal service to dispose off this material.
Disposal considerations Classification (REACH)
- Waste Codes in accordance with the European Waste catalogue (EWC) are origin-defined.

Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority.

SECTION 14 Transport information

14.1 UN Number
- Not classified as hazardous for transport

14.2 UN Proper Shipping Name
- Not applicable

14.3 Transport hazard class(es)
- Not applicable

14.4 Packing group
- Not applicable

14.5 Environmental hazards
- Not Classified

14.6 Special precautions for user
- Not Classified

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
- Not Classified

14.8 Domestic Surface Transport (US DOT)
- Proper Shipping Name: Not applicable
- DOT UN No.: Not applicable
- DOT Hazard Class: Not applicable
- DOT Packing Group: Not applicable

14.9 International Road/Rail (ADR/RID)
- Proper Shipping Name: Not applicable
- ADR UN No.: Not applicable
- ADR Hazard Class: Not applicable
- ADR Packing Group: Not applicable
- Tunnel Code: Not applicable

14.10 Ocean/Sea (IMO/IMDG)
- Proper Shipping Name: Not applicable
- IMDG UN No.: Not applicable
- IMDG Hazard Class: Not applicable
- IMDG Packing Group: Not applicable

14.11 Air (ICAO/IATA)
- Proper Shipping Name: Not applicable
- ICAO Un No.: Not applicable
- ICAO Hazard Class: Not applicable
- ICAO Packing Group: Not applicable

SECTION 15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

(This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006 - 453/2010, WHMIS 2015 requirements as specified in the Hazardous Products Act (HPA) and the HazardousProducts Regulations (HPR), and with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

- Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe.

SECTION 16 Other information

Date of Preparation: January 2024
Revision: Rev. 0
Replaces: New issue

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Arena BioScien Manufacturers, SEA. shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANT.

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Safety Data Sheet