

MATERIAL SAFETY DATA SHEET

Section 1: Company Identification and Product information

Product Name: Gram's Stains-Kit(ContainsBA087, BA088, BA027, BA028)

Product Code No.:BA026

Manufacturer's Name:

BIOMARK LABORATORIES

135/1, DALVI WADI, DHAIRI,

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Section 2: Composition/Information on Ingredients

Formula

Reagents:

Gram's Crystal Violet (BA027)

Crystal Violet (Hucker's)

Solution A:

*Crystal violet	2.00 g
*Ethyl alcohol 95%	20.00 ml

Solution B

*Ammonium oxalate	0.80 g
Distilled water	80.00 ml.

Solutions A and B mixed. Stored for 24 hours before use. The resulting stain is stable.

Gram's Decolorizer (BA088)

*Ethyl alcohol 95%	50.00 ml
*Acetone	50.00 ml.

Gram's Iodine (BA087)

*Iodine	1.00 g
*Potassium iodide	2.00 g
Distilled water	300.00 ml

Safranin 2.5% w/v (BA028)

*Safranin O 2.50 g	
*Ethyl alcohol 95%	100.00 ml

Counterstain working solution:Dilute 10 ml. of stock solution with distilled water to 100 ml.

* Harmful/Irritant/Flammable/Toxic material/Dangerous for the environment

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Hazardous Component	CAS-No.	Hazard Symbol	Risk Phrases	Safety Phrases
Crystal violet	548-62-9	Xn (Harmful)	R 22-41-50/53	S 26-39-60-61
Ethyl alcohol, 95%	64-17-5	Flammable	R 11	S 7-16
Ammonium oxalate	1113-38-8	Toxic	---	---
Acetone	67-64-1	Xi (Irritant)/Flammable	R 11-36-66-67	S 9-16-26
Iodine	7553-56-2	Xn (Harmful)	R 20/21-50	S 23-25-61
Potassium iodide	7681-11-0	Xi (Irritant)	R 42/43	S 22-36/37-45
Safranin O	477-73-6	Xi (Irritant)	R 36/37/38	S 26-36

Section 3: Health Hazards Identification

Refer Section 2 and 15.

Section 4: First Aid Measures

General Information: No special measures required.

Ingestion: If swallowed, seek medical attention if symptoms occur. Show physician product label or MSDS.

Inhalation: If inhaled, supply fresh air or oxygen. Seek medical attention if breathing becomes labored or difficult

Eye Contact: Rinse opened eye for at least 15 minutes under running water, lifting lower and up eyelids occasionally. Seek medical attention.

Skin Contact: Remove contaminated clothing. Immediately wash with plenty of soap and water for at least 15 minutes. Wash clothing before reuse. Seek medical attention if irritation develops.

Section 5: Fire Fighting Measures

Use Carbon dioxide, ABC multipurpose dry chemical, or water spray. Fight larger fires with water spray or alcohol resistant foam. Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Section 6: Accidental Release Measures

Personal Precautions: Wear suitable protective clothing. Remove contaminated exhaustion at the workplace.

Environmental Precautions: Prevent dispersion of material. Wipe up with damp sponge or mop.

Clean-up Methods: Avoid prolonged or repeated exposure. Absorb material, ventilate area, and wash spill site after material has been cleaned up. Avoid inhalation, contact with eyes and skin. Prevent formation of dust.

Section 7: Handling and Storage

Handling: Refer to Section 8

Storage: Store below 30°C.

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Section 8: Exposure Controls/ Personal Protection

Wear appropriate NIOSH/MSHA-approved respirator, chemical-resistant gloves, safety goggles, other protective clothing. Mechanical exhaust required.

Section 9: Physical and Chemical Properties

Appearance: Liquid (BA027& BA028), Clear liquid (BA088& BA087)
Colour: Purple (BA027) Colourless (BA088), Yellow (BA087), Red (BA028)

Section 10: Stability and Reactivity

Stability: Stable under recommended storage and handling conditions
Conditions to avoid: Exposure to heat and light.

Section 11: Toxicological Information

LD/LC50 values that are relevant: N/A
Carcinogenicity: Not listed.

Section 12: Ecological Information

Ecotoxicity Tests: No specific data available.

Section 13: Disposal Considerations

Disposal consideration: Non- hazardous waste. Dispose of according to all federal, state and local applicable regulations.
Container information: Containers should be cleaned by appropriate methods and then reused or disposed of by landfill or incineration as applicable.

Section 14: Transport Information

DOT Regulations: Not Regulated
Not classified.

Section 15: Regulatory Information

Risk Phrases:

R 22, Harmful if swallowed.
R 41, Risk of serious damage to eyes.
R 50/53, Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R11, Highly flammable.
R36, Irritating to eyes.
R66, Repeated exposure may cause skin dryness or cracking.

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R67, Vapours may cause drowsiness and dizziness.
R20/21, Harmful by inhalation and in contact with skin.
R50, Very toxic to aquatic organisms.
R42/43, May cause sensitization by inhalation and skin contact.
R36/37/38, Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 26, In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 39, Wear eye/face protection.
S 60, This material and its container must be disposed of as a hazardous waste.
S 61, Avoid release to the environment. Refer to the special instructions/Safety data sheets.
S7, Keep container tightly closed.
S16, Keep away from sources of ignition - No smoking.
S 9, Keep container in a well-ventilated place
S23, Do not breathe gas/fumes/vapour/spray.
S25, Avoid contact with eyes.
S22, Do not breathe dust.
S36/37, Wear suitable protective clothing and gloves.
S45, In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S36, Wear suitable protective clothing.

Section 16: Other Information

Information contained herein is believed to be accurate and is offered in good faith for the user's consideration and investigation. No warranty is expressed or implied regarding the completeness or accuracy of this information. Users of this material should satisfy themselves by independent investigation of current scientific or medical information that this material may be safely handled.