



MATERIAL SAFETY DATA SHEET BROMOPHEN - A

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME:	BROMOPHEN - A
SYNONYMS:	B3/A
PART No.:	BPHNA
UN/NA (PIN) No.:	0
EMERGENCY TELEPHONE:	FOR MEDICAL EMERGENCY IN THE UNITED STATES AND CANADA CALL 1-800-842-9660 (PRODUCT MISUSE). FOR TRANSPORTATION EMERGENCY CALL CHEMTREC 1-800-424-9300.
SUPPLIER:	ILFORD Imaging USA Inc West 70 Century Road, Paramus, NJ 07653 Tel: 201-265-6000
CONTACT PERSON:	Bryan Sammartino

2. COMPOSITION, INFORMATION ON INGREDIENTS

INGREDIENT NAME:	CAS No.:	CONTENTS :	EPA RQ:	TPQ:
HYDROQUINONE	123-31-9	60-100 %		
SODIUM METABISULPHITE	7681-57-4	10-30 %		
1-PHENYL-3-PYRAZOLIDONE	92-43-3	1-5 %		

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Cream or brown, odorless, non-flammable powder. Soluble in water. Contains hydroquinone.

Harmful by inhalation and if swallowed. May cause sensitisation by skin contact.

ACUTE EFFECTS:

INHALATION: Harmful by inhalation. Dust may irritate respiratory system or lungs.

INGESTION: Harmful if swallowed. May cause discomfort if swallowed. Liquid irritates mucous membranes and may cause abdominal pain if swallowed.

SKIN: Irritating to skin. May cause sensitisation by skin contact. May cause allergic contact eczema.

EYES: Irritation of eyes and mucous membranes. Repeated exposure may cause chronic eye irritation.

CHRONIC EFFECTS:

HEALTH WARNINGS:

Prolonged or repeated exposure may cause severe irritation. May cause irritation to the respiratory system. May cause skin irritation/eczema. May cause sensitisation by skin contact. Dust may irritate respiratory system or lungs. May cause allergy. May cause hypersensitivity.

ROUTE OF ENTRY:

Inhalation. Ingestion. Skin and/or eye contact.

MEDICAL INFORMATION:

May aggravate existing: Chronic respiratory and obstructive airway diseases. Skin disorders and allergies.
Pre-existing eye problems.

4. FIRST AID MEASURES

- INHALATION:** Move the exposed person to fresh air at once. Provide rest, warmth and fresh air. Rinse nose and mouth with water. Get medical attention if any discomfort continues. When breathing is difficult, properly trained personnel may assist affected person by administering 100% oxygen.
- INGESTION:** DO NOT INDUCE VOMITING! Remove victim immediately from source of exposure. Rinse mouth thoroughly. Get medical attention immediately! Immediately give a couple of glasses of water, provided the victim is fully conscious.
- SKIN:** Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention immediately.
- EYES:** Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with lots of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

5. FIRE FIGHTING MEASURES**EXTINGUISHING MEDIA:**

This material is not flammable. Use extinguishing media appropriate for surrounding fire.

6. ACCIDENTAL RELEASE MEASURES**SPILL CLEAN-UP PROCEDURES:**

Use appropriate protective clothing. Do not contaminate drainage or waterways. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Contain Spill. Do not flush to septic tank. See Section 13 for disposal considerations. Flush with plenty of water to clean spillage area. Do not let washing down water contaminate ponds or waterways. Inform Authorities if large amounts are involved.

7. HANDLING AND STORAGE**HANDLING PRECAUTIONS:**

Read and follow manufacturer's recommendations. Avoid spilling, skin and eye contact. Provide good ventilation. Avoid handling which leads to dust formation. Persons with impaired lung functions should not handle this preparation. Individuals liable to allergic reactions should not handle the product

STORAGE PRECAUTIONS:

Keep in cool, dry, ventilated storage and closed containers. Store below 75°F. Keep in original container. Keep containers closed tightly.

STORAGE CRITERIA:

Chemical storage.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

PROTECTIVE EQUIPMENT:**ENGINEERING CONTROLS:**

Provide eyewash station and safety shower.

VENTILATION: All handling to take place in well ventilated area. If enclosed handling cannot be guaranteed, ventilation and protective clothing must be used. Provide sufficient ventilation for operations causing dust formation. General room ventilation should provide for 10 - 15 room air changes per hour.

RESPIRATORS: No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists. Wear respirator if there is dust formation.

PROTECTIVE GLOVES:

Use protective gloves made of: Rubber (natural, latex). Neoprene. Polyethylene.

EYE PROTECTION:

Wear approved safety goggles.

PROTECTIVE CLOTHING:

Wear appropriate clothing to prevent any possibility of skin contact. Wear dust masks in dusty areas. Wear rubber apron.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE:	Powder, dust. Water soluble.	
COLOR:	Cream. Brown.	
ODOR:	No characteristic odor.	
SOLUBILITY DESCRIPTION:	Soluble in water.	
BOILING POINT (°F, interval):	212	PRESSURE: 760mmHg
pH-VALUE, CONC. SOLUTION:	5.80	

10. STABILITY AND REACTIVITY

STABILITY: Normally stable.

CONDITIONS TO AVOID:

Avoid excessive heat for prolonged periods of time.

HAZARDOUS POLYMERIZATION:

Will not polymerize.

MATERIALS TO AVOID:

Avoid contact with other photographic solutions and/or cleaning compounds.

11. TOXICOLOGICAL INFORMATION

TOXIC DOSE - LD 50: hydroquinone 320; sodium metabisulphite 1540; 1-phenyl-3-pyrazolidone 200 mg/kg (oral rat)

TOXICOLOGICAL INFORMATION:

This chemical formulation has not been tested for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

12. ECOLOGICAL INFORMATION

LC 50, 96 HRS, FISH, mg/l: 0.1 hydroquinone; >150 sodium metabisulphite; >1 1-phenyl-3-pyrazolidone

EC 50, 48 HRS, DAPHNIA, mg/l: 89 sodium metabisulphite
IC 50, 72 HRS, ALGAE, mg/l: 1.0 hydroquinone; 48 sodium metabisulphite

ECOLOGICAL INFORMATION:
 Not regarded as dangerous for the environment.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS:

Unused and spent solutions may be allowed to be discharged to sanitary sewer by permit IF allowed by local regulations. Consult your local authority for advice. Waste may have to be pretreated before discharge. Consult local authorities before discharging any waste to sewer. Do not discharge to septic system. Waste that cannot be discharged to sewer may have to be handled by a licensed hazardous waste contractor.

14. TRANSPORT INFORMATION

U.S. DOT:
UN/NA No.: 0
U.S. DOT HAZARD LABEL: No DOT label requirement noted
U.S. DOT CLASS: No classification noted.
INFORMATION ON ROAD TRANSPORT: Not classified for road transport

SEA TRANSPORT:
INFORMATION ON SEA TRANSPORT: Not classified for sea transport

AIR TRANSPORT:
INFORMATION ON AIR TRANSPORT: Not classified for air transport

15. REGULATORY INFORMATION

REGULATORY STATUS OF INGREDIENTS:

NAME:	CAS No:	TSCA:	CERCLA:	SARA 302:	SARA 313:	DSL(CAN):
1-PHENYL-3-PYRAZOLIDONE	92-43-3	Yes	No	No	No	Yes

US FEDERAL REGULATIONS:
REGULATORY STATUS: TSCA: The ingredients of this product are on the TSCA Inventory.

ENVIRONMENTAL LISTING: Hydroquinone: Clean Air Act, S.111 (40 CFR 60-EPA). IARC - Animal carcinogen. IARC-Int. Agency for Cancer Research. DOT Hazardous Mat. Transp. Act (49 CFR). NTP-Annual Plan (DHHS). NIOSH Criteria Documents. IRPTC-International Register of Potentially Toxic Chemicals (UNEP). OSHA Chemical Hazard Communic. Std. - Air Contaminants (29CFR1910). ACGIH Threshold Limit Values. EPA Reportable & Threshold Quantities. SARA Section 302, Extremely Hazardous Substances. SARA Section 313, Toxic Chemicals. SARA Title III Consolidated Chemical List (302, CERCLA, 313, RCRA).

STATE REGULATIONS:
STATE REGULATORY STATUS: Florida Hazardous Substance List Massachusetts Extraordinarily Hazardous Substances List Massachusetts Right-to-Know. New Jersey Right-to-Know. NJ Environmental Hazardous Substances List NJ Special Hazardous Substances List Pennsylvania Right-to-Know.

16. OTHER INFORMATION

USER NOTES:

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INFORMATION SOURCES:

European Photographic Chemical Industry Code of Practice For Classification And Labelling Material Safety Data Sheet, Misc. manufacturers. Safeware Quasar Ltd
USA Regulatory Information ANSI Z400.1-1998 Material Safety Data Sheets - Preparation

PREPARED BY:

Dr D W Butcher, ILFORD IMAGING Limited, Mobberley, Knutsford, Cheshire, WA16 7JL. ENGLAND.

REVISION No./Repl. MSDS of:

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