

ILFORD PHOTO

HARMAN technology Ltd

SAFETY DATA SHEET

Bromophen Developer (Part B)

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification

Product identifier

Product name Bromophen Developer (Part B)

Product number 1960549

Internal identification 10006

Container size 600g

Recommended use of the chemical and restrictions on use

Application Photographic Developer

Details of the supplier of the safety data sheet

Supplier

Distributor

USA: Robert Distributors, 220 East Saint Clair St, Indianapolis, IN 46204

Tel: 877-281-6405

Contact Person

Contact Distributor: sales@robertsdistributors.com

Emergency telephone number

Emergency telephone USA/Canada: For medical emergency, call 1 800 842 9660 (Product Misuse).

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Eye Irrit. 2A - H319

Environmental hazards Not Classified

Label elements

Pictogram



Signal word

Warning

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P280 Wear protective gloves, eye and face protection.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents/ container in accordance with local regulations.

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Other hazards

No information available.

3. Composition/information on ingredients

Mixtures

SODIUM CARBONATE	30-60%
CAS number: 497-19-8	
Classification	
Eye Irrit. 2A - H319	
Sodium Sulfite	30-50%
CAS number: 7757-83-7	
Classification	
Not Classified	
Potassium Bromide	1-5%
CAS number: 7758-02-3	
Classification	
Eye Irrit. 2 - H319	
Benzotriazole	<1%
CAS number: 95-14-7	
Classification	
Acute Tox. 4 - H302	
Eye Irrit. 2 - H319	
Aquatic Chronic 2 - H411	

The full text for all hazard statements is displayed in Section 16.

4. First-aid measures

Description of first aid measures

Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
Skin Contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.

Most important symptoms and effects, both acute and delayed

Inhalation	No specific symptoms known.
Ingestion	No specific symptoms known.
Skin contact	No specific symptoms known.

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Eye contact This product is strongly irritating.

Indication of immediate medical attention and special treatment needed

Notes for the doctor No specific recommendations.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media The product is non-combustible. Use fire-extinguishing media suitable for the surrounding fire.

Special hazards arising from the substance or mixture

Specific hazards No unusual fire or explosion hazards noted.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Oxides of the following substances: Carbon. Sulfur. Sodium.

Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapors.

Special protective equipment for firefighters Use protective equipment appropriate for surrounding materials. Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin and eyes. Avoid inhalation of dust. Provide adequate ventilation.

Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing, gloves, eye and face protection. Remove spillage with vacuum cleaner or collect with a shovel and broom, or similar. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

Reference to other sections For personal protection, see Section 8. For waste disposal, see section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Do not breathe dust. Provide adequate ventilation. Avoid spilling. Read and follow manufacturer's recommendations.

Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container. Storage advice to ensure the product remains in a useable condition throughout its specified shelf life: Store at temperatures not exceeding 30°C.

Storage class Chemical storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

8. Exposure Controls/personal protection

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Ingredient comments No exposure limits known for ingredient(s).

Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible.

Hand protection

Use protective gloves.

Other skin and body protection

Wear appropriate clothing to prevent skin contamination.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Dusty powder.
Color	White.
Odor	No characteristic odor.
pH	pH (concentrated solution): 10
Solubility(ies)	Soluble in water. 100%
Other information	Not available.

10. Stability and reactivity

Reactivity	The reactivity data for this product will be typical of those for the following class of materials: Alkalis - inorganic. See the other subsections of this section for further details.
Stability	Stable under the prescribed storage conditions. No particular stability concerns.
Possibility of hazardous reactions	The following materials may react strongly with the product: Strong acids. Under normal conditions of storage and use, no hazardous reactions will occur.
Conditions to avoid	No specific requirements are anticipated under normal conditions of use.
Materials to avoid	Strong acids. Avoid contact with other photographic solutions and/or cleaning compounds.
Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Oxides of the following substances: Carbon. Sulfur. Sodium.

11. Toxicological information

Information on toxicological effects

Toxicological effects	This chemical formulation has not been tested for health effects. Exposure effects listed are based on existing health data for the individual components that comprise the mixture.
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Inhalation	Dust may irritate the respiratory system.
Ingestion	May cause discomfort if swallowed.
Skin Contact	Powder may irritate skin.
Eye contact	Irritating to eyes.
Route of entry	Inhalation Ingestion. Skin and/or eye contact
Medical considerations	May aggravate existing: Skin disorders and allergies. Pre-existing eye problems.

Benzotriazole

Acute toxicity - oral

Acute toxicity oral (LD₅₀
mg/kg)

560.0

Species

Rat

ATE oral (mg/kg)

560.0

12. Ecological Information

Toxicity The product is not expected to be hazardous to the environment.

SODIUM CARBONATE

Acute toxicity - fish

LC₅₀, 96 hours: 320 (Bluegill) mg/l, Fish

Sodium Sulfite

Acute toxicity - fish

LC₅₀, 96 hours: 220 - 460 mg/l, Fish

Acute toxicity - aquatic
invertebrates

EC₅₀, 48 hours: 69 mg/l, Daphnia magna

Potassium Bromide

Acute toxicity - fish

LC₅₀, 96 hours: 3200 (Onchorhynchus) mg/l, Fish

Acute toxicity - aquatic
invertebrates

EC₅₀, 48 hours: 600 mg/l, Daphnia magna

Benzotriazole

Acute toxicity - fish

LC₅₀, 96 hours: 26 (Lepomis macrochirus) mg/l, Fish

Acute toxicity - aquatic
invertebrates

EC₅₀, 48 hours: 91 mg/l, Daphnia magna

Acute toxicity - aquatic
plants

IC₅₀, 72 hours: 231 mg/l, Algae

Persistence and degradability

Persistence and degradability The product contains inorganic substances which are not biodegradable.

Bioaccumulative potential

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Bio-Accumulative Potential Bioaccumulation is unlikely.

Mobility in soil

Mobility The product is soluble in water.

Other adverse effects

Other adverse effects Not known.

13. Disposal considerations

Waste treatment methods

Disposal methods Used, diluted, 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 pre-treated 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

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

UN Number

Not applicable.

UN proper shipping name

Not applicable.

Transport hazard class(es)

Not applicable.

Transport labels

No transport warning sign required.

DOT transport labels

No transport warning sign required.

Packing group

Not applicable.

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

Not applicable.

DOT TIH Zone Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US State Regulations

Bromophen Developer (Part B)

State Regulations Comments No information available.

Inventories

US - TSCA

SODIUM CARBONATE

Sodium Sulfite

Sodium Tripolyphosphate

Potassium Bromide

Benzotriazole

16. Other information

General information	HARMAN technology Ltd believe the information and recommendations contained herein are based on correct and factual data. However, no express or implied guarantee or warranty of any kind is made with respect to this information. Use this information only to supplement other information you have gathered and then make an independent determination about the completeness and suitability of all information to ensure the proper use and disposal of this product and the health and safety of employees and customers.
Key literature references and sources for data	European Photographic Chemical Industry Code of Practice For Classification And Labelling Material Safety Data Sheet, Misc. manufacturers. Dangerous Properties of Industrial Chemicals, 6.edition, N.Sax, 1984.
Issued by	SHE.Team@harmantechnology.com
	9/27/2017
Revision date	2
Revision	14/05/2015
Supersedes date	H302 Harmful if swallowed.
Hazard statements in full	H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects.