

ILFORD PHOTO

HARMAN technology Ltd

SAFETY DATA SHEET

Bromophen Developer (Part B)

According to WHMIS 2015, in compliance with the Hazardous Product Act (HPA, as amended) and the requirements of the Hazardous Product Regulations (HPR)

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

Restriction on use Photographic Developer

Details of the supplier of the safety data sheet

Supplier Distributor
Amplis Foto Inc, 22 Telson Road,
Markham, Ontario L3R 1E5
Tel: 905 477 4111
Fax: 905 477 2502

Contact person Contact Distributor: christine@amplis.com, <http://www.amplis.com>

Emergency telephone number

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

2. Hazard identification

Classification of the substance or mixture

Physical hazards Not Classified
Health hazards Eye Irrit. 2A - H319
Environmental hazards Not Classified

Label elements

Hazard pictograms



Signal word Warning

Hazard statements H319 Causes serious eye irritation.

Bromophen Developer (Part B)

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.

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 Sulfit	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.

Bromophen Developer (Part B)

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.
Eye contact	This product is strongly irritating.

Indication of any 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.

Specific hazards arising from the hazardous product

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 vapours.
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

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.

Bromophen Developer (Part B)

Storage class Chemical storage.

Specific end use(s)

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

8. Exposure controls/Personal protection

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.

Colour White.

Odour No characteristic odour.

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.

Bromophen Developer (Part B)

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.

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 exposure Inhalation Ingestion. Skin and/or eye contact

Medical considerations May aggravate existing: Skin disorders and allergies. Pre-existing eye problems.

Toxicological information on ingredients

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.

Ecological information on ingredients

SODIUM CARBONATE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 320 (Bluegill) mg/l, Fish

Sodium Sulfite

Acute aquatic toxicity

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 aquatic toxicity

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 aquatic toxicity

Bromophen Developer (Part B)

Acute toxicity - fish	LC ₅₀ , 96 hours: 26 (Lepomis macrochirus) mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 91 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: 231 mg/l, Algae

Persistence and degradability

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

Bioaccumulative potential

Bioaccumulative 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, TDG).

UN number

UN No. (International) Not applicable.

UN proper shipping name

Proper shipping name (International) Not applicable.

Transport hazard class(es)

Transport Labels (International) Not applicable.

Transport labels

No transport warning sign required.

DOT transport label

Packing group

Packing group (International) Not applicable.

Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

Bromophen Developer (Part B)

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

Inventories

Canada – DSL/NDSL

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	HS&E Advisor Dr Trevor Rhodes Tel: +44(0)1565 650000, email: trevor.rhodes@harmantechnology.com
Revision date	2017-09-27
Revision	2
Supersedes date	14/05/2015
Hazard statements in full	H302 Harmful if swallowed. H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects.