

# ILFORD PHOTO

## HARMAN technology Ltd

### SAFETY DATA SHEET Bromophen Developer (Part A)

#### 1. IDENTIFICATION

<b>Product Name</b>	Bromophen Developer (Part A)
<b>Product No.</b>	1960549
<b>Internal Id</b>	10119
<b>Container Size</b>	12g
<b>Identification No.</b>	3077
<b>Identified uses</b>	Photographic Developer
<b>Supplier</b>	Distributors USA: WYNIT Inc, 5801 East Taft Road, North Syracuse, NY 13212. Tel: 1 800 GO WYNIT (469 9648) or 1 315 437 4167, Fax: 1 315 437 0432 Canada: Amplis Foto Inc, 22 Telson Road, Markham, Ontario L3R 1E5, Tel: 905 477 4111, Fax: 905 477 2502
<b>Contact Person</b>	USA: ilfordhelp@wynit.com; Canada: phil.nielsen@amplis.com
<b>Emergency Telephone</b>	USA/Canada: For medical emergency, call 1 800 842 9660 (Product Misuse).

#### 2. HAZARD(S) IDENTIFICATION

<b>Appearance</b>	Crystals. Powder, dust
<b>Color</b>	White / off-white. Cream. Brown.
<b>Odor</b>	No characteristic odor.
<b>GHS Pictogram</b>	



**Signal Word** Danger

<b>Hazard Statements</b>	H302 Harmful if swallowed.
	H317 May cause an allergic skin reaction.
	H318 Causes serious eye damage.
	H341 Suspected of causing genetic defects.
	H351 Suspected of causing cancer.
	H410 Very toxic to aquatic life with long lasting effects.
<b>Precautionary Statements</b>	P101 If medical advice is needed, have product container or label at hand.
	P273 Avoid release to the environment.
	P280 Wear protective clothing, gloves, eye and face protection.
	P301+312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
	P302+352 IF ON SKIN: Wash with plenty of soap and water.
	P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P405 Store locked up.
	P501 Dispose of contents/container in accordance with local regulations.

# Bromophen Developer (Part A)

Contains

HYDROQUINONE

GHS Classification

Physical and Chemical Hazards Not classified.  
Human health Acute Tox. 4 - H302; Eye Dam. 1 - H318; Skin Sens. 1 - H317; Muta. 2 - H341; Carc. 2 - H351  
Environment Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410

## WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM - WHMIS

WHMIS Label



Materials Causing Immediate and Serious Toxic Effect.

### Controlled Product Classification

This Product has been classified according to the hazard criteria of the Controlled Products Regulations and the MSDS contains all required information.

#### Inhalation

Dust may irritate respiratory system or lungs.

#### Ingestion

Harmful if swallowed. May cause discomfort if swallowed.

#### Skin Contact

Powder may irritate skin. May cause sensitization by skin contact. May cause allergic contact eczema.

#### Eye Contact

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

#### Health Warnings

Prolonged or repeated exposure may cause severe irritation. May cause skin irritation/eczema. May cause sensitization 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 Considerations

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

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<b>1-PHENYL-3-PYRAZOLIDONE</b>	<b>1-5%</b>
<b>CAS No.: 92-43-3</b>	<b>EC No.: 202-155-1</b>
GHS Classification Acute Tox. 4 - H302; Aquatic Chronic 2 - H411	
<b>HYDROQUINONE</b>	<b>70-90%</b>
<b>CAS No.: 123-31-9</b>	<b>EC No.: 204-617-8</b>
GHS Classification Acute Tox. 4 - H302; Eye Dam. 1 - H318; Skin Sens. 1 - H317; Muta. 2 - H341; Carc. 2 - H351; Aquatic Acute 1 - H400	

## Bromophen Developer (Part A)

<b>SODIUM METABISULPHITE</b>	<b>10-30%</b>
<b>CAS No.: 7681-57-4</b>	<b>EC No.: 231-673-0</b>
GHS Classification Acute Tox. 4 - H302; Eye Dam. 1 - H318	

### 4. FIRST-AID MEASURES

#### Description of first aid measures

##### **Inhalation**

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

##### **Ingestion**

Rinse mouth thoroughly. 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. Contact physician if irritation continues.

##### **Eye Contact**

Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if irritation persists.

#### Most important symptoms and effects, both acute and delayed

##### **Inhalation**

No specific symptoms noted.

##### **Ingestion**

No specific symptoms noted.

##### **Skin Contact**

May cause skin sensitisation.

##### **Eye Contact**

Irritation of eyes and mucous membranes.

#### Indication of any immediate medical attention and special treatment needed

##### **Notes To The Physician**

No specific first aid measures noted.

### 5. FIRE-FIGHTING MEASURES

#### **Extinguishing Media**

Use fire-extinguishing media appropriate for surrounding materials.

#### **Unusual Fire & Explosion Hazards**

No unusual fire or explosion hazards noted.

#### **Specific Hazards**

When heated and in case of fire, harmful vapors/gases may be formed. Oxides of: Carbon. Nitrogen. Sulfur.

#### **Special Fire Fighting Procedures**

Avoid breathing fire vapors.

#### **Protective Equipment For Fire-Fighters**

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**

Wear protective clothing as described in Section 8 of this material safety data sheet. Avoid contact with skin and eyes. Provide adequate ventilation.

#### **Environmental Precautions**

Do not discharge into drains, water courses or onto the ground. The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

# Bromophen Developer (Part A)

## Spill Clean Up Methods

For waste disposal, see section 13. Small quantities may be flushed to drains with plenty of water. Prevent discharge of larger quantity to drain. Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like. Wash contaminated area with water. Do not let washing down water contaminate ponds or waterways.

## Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

## 7. HANDLING AND STORAGE

### Handling

Provide good ventilation. Avoid spilling, skin and eye contact. Do not eat, drink or smoke when using the product. Read and follow manufacturer's recommendations.

### Storage

Store in closed original container in a dry place. Store under well-ventilated conditions at a temperature below 25°C.

### Storage Class

Chemical storage.

### Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT	STD	TWA (8-hrs)		STEL (15 min)		Notes
HYDROQUINONE	ACGIH		1 mg/m <sup>3</sup>			A3, Sen
HYDROQUINONE	PEL		2 mg/m <sup>3</sup>			
SODIUM METABISULPHITE	ACGIH		5 mg/m <sup>3</sup>			A4

  

COMPONENT	IDLH
HYDROQUINONE	50 mg/m <sup>3</sup>

ACGIH=American Conference of Governmental Industrial Hygienists.

A3: Confirmed Animal Carcinogen with Unknown Relevance to Humans.

SEN: Sensitizer.

A4: Not Classifiable as a Human Carcinogen.

### Protective Equipment



### Engineering Measures

Provide adequate general and local exhaust ventilation.

### Respiratory Equipment

Wear suitable respiratory protection.

### Hand Protection

Use protective gloves.

### Eye Protection

Use eye protection.

### Other Protection

Wear appropriate clothing to prevent reasonably probable skin contact.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Crystals. Powder, dust
<b>Color</b>	White / off-white. Cream. Brown.
<b>Odor</b>	No characteristic odor.
<b>Solubility</b>	Soluble in water. 100%

## Bromophen Developer (Part A)

pH-Value, Conc. Solution

5.8

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### 10. STABILITY AND REACTIVITY

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#### Reactivity

No specific reactivity hazards associated with this product.

#### Stability

Stable under the prescribed storage conditions. No particular stability concerns.

#### Hazardous Polymerisation

Will not polymerise.

#### Conditions To Avoid

Avoid excessive heat for prolonged periods of time. Avoid contact with acids.

#### Materials To Avoid

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

#### Hazardous Decomposition Products

Fire or high temperatures create: Vapors/gases/fumes of: Oxides of: Sulfur. Carbon. Nitrogen.

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### 11. TOXICOLOGICAL INFORMATION

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#### 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 that comprise the mixture.

##### Toxicological Information on Ingredients:

##### HYDROQUINONE (CAS: 123-31-9)

##### **Toxic Dose 1 - LD 50**

320 mg/kg (oral rat)

##### **Toxic Dose 2 - LD 50**

>900 mg/kg (skn-rat)

##### 1-PHENYL-3-PYRAZOLIDONE (CAS: 92-43-3)

##### **Toxic Dose 1 - LD 50**

200 mg/kg (oral rat)

##### SODIUM METABISULPHITE (CAS: 7681-57-4)

##### **Toxic Dose 1 - LD 50**

1540 mg/kg (oral rat)

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### 12. ECOLOGICAL INFORMATION

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#### Toxicity

Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

#### Degradability

There are no data on the degradability of this product.

#### Bioaccumulative potential

No data available on bioaccumulation.

#### Mobility:

The product is soluble in water.

#### Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB Substances.

#### Other adverse effects

None known.

# Bromophen Developer (Part A)

## Ecological Information on Ingredients:

### HYDROQUINONE (CAS: 123-31-9)

LC 50, 96 Hrs, Fish mg/l  
0.10-0.18 (Fathead Minnow)  
EC 50, 48 Hrs, Daphnia, mg/l  
0.05  
IC 50, 72 Hrs, Algae, mg/l  
1.0

### 1-PHENYL-3-PYRAZOLIDONE (CAS: 92-43-3)

LC 50, 96 Hrs, Fish mg/l  
>1

### SODIUM METABISULPHITE (CAS: 7681-57-4)

LC 50, 96 Hrs, Fish mg/l  
>150  
EC 50, 48 Hrs, Daphnia, mg/l  
89  
IC 50, 72 Hrs, Algae, mg/l  
48

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## 13. DISPOSAL CONSIDERATIONS

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### 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.

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## 14. TRANSPORT INFORMATION

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<b>General</b>	Limited Quantity Exemption. No labeling or placarding required for land and air transport within the USA under 49CFR 171.4 or for land transport within Canada under SOR/2008-34.
<b>UN No. (DOT/TDG)</b>	3077
<b>UN No. (IMDG)</b>	3077
<b>UN No. (ICAO)</b>	3077
<b>DOT Proper Shipping Name</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (contains hydroquinone)
<b>TDG Proper Shipping Name</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (contains hydroquinone)
<b>IMDG Class</b>	9
<b>ICAO Class</b>	9
<b>Transport Labels</b>	



<b>IMDG Pack Group</b>	III
<b>Air Pack Group</b>	III
<b>Environmentally Hazardous Substance/Marine Pollutant</b>	

## Bromophen Developer (Part A)



EMS

F-A, S-F

Transport in Bulk according to Annex II of MARPOL 73/78 and the IBC Code Notes

Not applicable.

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### 15. REGULATORY INFORMATION

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#### Regulatory Status (US)

TSCA: The ingredients of this product are on the TSCA Inventory.

#### US Federal Regulations

##### SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

The following ingredients are listed.

HYDROQUINONE; EPCRA 302 TPQ 10 000 lbs 500 lbs Tier II TPQ 500 lbs

##### CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

The following ingredients are listed.

HYDROQUINONE; 100 lbs (45.4 Kg)

##### SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed.

##### SARA 313 Emission Reporting

The following ingredients are listed.

HYDROQUINONE 85.35%

##### CAA Accidental Release Prevention

None of the ingredients are listed.

##### OSHA Highly Hazardous Chemicals

None of the ingredients are listed.

#### US State Regulations

##### State Regulations Comments

No information available.

##### California Proposition 65 Carcinogens and Reproductive Toxins

None of the ingredients are listed.

##### California Air Toxics "Hot Spots" (A-I)

The following ingredients are listed.

HYDROQUINONE

##### California Air Toxics "Hot Spots" (A-II)

None of the ingredients are listed.

##### Massachusetts "Right To Know" List

The following ingredients are listed.

HYDROQUINONE

SODIUM METABISULPHITE

##### Rhode Island "Right To Know" List

The following ingredients are listed.

HYDROQUINONE

SODIUM METABISULPHITE

##### Minnesota "Right To Know" List

The following ingredients are listed.

HYDROQUINONE

SODIUM METABISULPHITE

##### New Jersey "Right To Know" List

The following ingredients are listed.

HYDROQUINONE

## Bromophen Developer (Part A)

SODIUM METABISULPHITE

### Pennsylvania "Right To Know" List

The following ingredients are listed.

HYDROQUINONE

SODIUM METABISULPHITE

### International Inventories

#### Canada – DSL/NDSL

All ingredients are listed or exempt.

#### US - TSCA

All ingredients are listed or exempt.

#### US – TSCA 12(b) Export Notification

None of the ingredients are listed.

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## 16. OTHER INFORMATION

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### 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.

### Information Sources

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.

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