

**Bromophen Developer (Part A) USA/Can**

ACCORDING TO US CFR 1910.1200

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Product Name Bromophen Developer (Part A) USA/Can  
Product code 1960549

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified Use(s) Photographic Developer  
Uses Advised Against Not known.

**1.3 Details of the supplier of the safety data sheet**

Manufacturer  
Company Identification HARMAN Technology Ltd  
Address of Manufacturer Ilford Way  
Mobberley  
Knutsford  
Cheshire East  
Postal code WA16 7JL  
Telephone: +44(0)1565 650000  
Fax +44(0)1565 872734  
E-mail web-admin@harmantechnology.com  
Office hours

Supplier  
Company Identification Roberts Distributors L.P.  
Address of Supplier 220 E Saint Clair St.  
Indianapolis  
IN  
Zip code 46204 USA  
Telephone: +1 877-281-6405  
E-mail info@robertsdistributors.com  
Office hours

**1.4 Emergency telephone number**

State & Territory Poison Help Centres  
Emergency Phone No. 1-800-222-1222  
Contact PoisonHelp@hrsa.gov

**SECTION 2: HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

US CFR 1910.1200 Acute Tox. 4 :Harmful if swallowed.  
Skin Sens. 1B :May cause an allergic skin reaction.  
Eye Dam. 1 :Causes serious eye damage.  
Muta. 2 :Suspected of causing genetic defects.  
Carc. 2 :Suspected of causing cancer.

**2.2 Label elements**

According to US CFR 1910.1200  
Product Name Bromophen Developer (Part A) USA/Can

Hazard Pictogram(s)



GHS05



GHS08



GHS07

Signal Word(s)

Danger

Hazard Statement(s)

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.

Precautionary Statement(s)

P101: If medical advice is needed, have product container or label at hand.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.

**Bromophen Developer (Part A) USA/Can**

P301+P312: IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.  
 P302+P352: IF ON SKIN: Wash with plenty of water.  
 P305+P351+P338: 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 in accordance with local, state or national legislation.

**2.3 Other hazards**

None known.

**2.4 Additional Information**

For full text of H/P Statements see section 16.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

Not applicable.

**3.2 Mixtures**

HAZARDOUS INGREDIENT(S)	CAS No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
1,4-dihydroxybenzenehydroquinonequinol	123-31-9	60-100%	Acute Tox. 4 H302 Skin Sens. 1B H317 Eye Dam. 1 H318 Muta. 2 H341 Carc. 2 H351	GHS05 GHS08 GHS07
sodium metabisulphite	7681-57-4	10-30%	Acute Tox. 4 H302 Eye Dam. 1 H318	GHS05 GHS07
1-phenyl-3-pyrazolidone	92-43-3	1-5%	Acute Tox. 4 H302 Acute Tox. 4 H312	GHS07

For full text of H/P Statements see section 16.

**SECTION 4: FIRST AID MEASURES****4.1 Description of first aid measures**

Inhalation IF exposed or concerned: Get medical advice/attention.  
 Skin Contact Take off immediately all contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see Medical Advice on this label). IF exposed or concerned:  
 Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE/doctor.  
 Ingestion Rinse mouth. Immediately call a POISON CENTRE/doctor.

**4.2 Most important symptoms and effects, both acute and delayed**

Causes burns. Allergic contact dermatitis.

**4.3 Indication of any immediate medical attention and special treatment needed**

Specific treatment (see Medical Advice on this label). Immediately call a POISON CENTRE/doctor. Treat symptomatically.

**SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing media**

Suitable Extinguishing media As appropriate for surrounding fire.  
 Unsuitable extinguishing media None.

**5.2 Special hazards arising from the substance or mixture**

May decompose in a fire, giving off toxic and irritant vapours.

**5.3 Advice for firefighters**

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Dike fire control water for later disposal.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation. Avoid dust generation. Do not breathe dust. Ensure full personal protection (including respiratory protection) during removal of spillages.

**Bromophen Developer (Part A) USA/Can****6.2 Environmental precautions**

Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

**6.3 Methods and material for containment and cleaning up**

Sweep up spilled substance and remove to safe place. Use vacuum equipment for collecting spilt materials, where practicable. Contain spillages with sand, earth or any suitable adsorbent material. Earth may be shovelled to contain spillage and to avoid contamination of sewers and watercourses.

**6.4 Reference to other sections**

See Also Section 8, 13.

**SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.

**7.2 Conditions for safe storage, including any incompatibilities**

Store locked up.

Storage temperature

Ambient.

Storage life

Stable under normal conditions.

Incompatible materials

None known.

**7.3 Specific end use(s)**

Photographic Developer

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters****8.1.1 Occupational Exposure Limits**

Occupational Exposure Limits						
SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m <sup>3</sup> )	STEL (ppm)	STEL (mg/m <sup>3</sup> )	Note
Hydroquinone (Dihydroxybenzene)	123-31-9		1			ACGIH TLV, DSEN, A3
Hydroquinone; 1,4-benzendiol; Dihydroxybenzene	123-31-9		2			OSHA PEL
Hydroquinone (Dihydroxybenzene)	123-31-9				2	NIOSH REL Z-1, C, ST [15min]
Hydroquinone (Dihydroxybenzene)	123-31-9		2			OSHA PEL Z-1
Sodium metabisulfite	7681-57-4		5			ACGIH TLV, A4
Sodium metabisulfite	7681-57-4		5			NIOSH REL Z-1

Remark	Notes
ACGIH TLV	The American Conference of Governmental Industrial Hygienists (ACGIH®) Threshold Limit Values (TLVs®), 2024
DSEN	May cause dermal sensitization
A3	Confirmed Animal Carcinogen with Unknown Relevance to Humans
OSHA PEL	Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs), 2019
NIOSH REL Z-1	National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Limits (RELs) from the NIOSH Pocket Guide to Chemical Hazards table Z-1: Up to 10-hour time weighted average (TWA) during a 40-hour work week, 2022
C	Ceiling limit of Short-term Exposure Limit
ST [15min]	Short Term Exposure Limit with 15min duration
OSHA PEL Z-1	Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) from 29 CFR 1910.1000 Z-1 Table, 2022
A4	Not Classifiable as a Human Carcinogen





Biological Exposure Indices						
Substances	CAS Number	Sampling	Tissues	Control parameters	Biological monitoring guidance value	Comments
Methemoglobin Inducers	123-31-9	During or end of shift	blood	Methemoglobin	5% of hemoglobin	B, Ns

Remark	Notes
B	Background
b	After exposure to soluble compounds
Ns	Nonspecific

**8.2 Exposure controls**

8.2.1. Appropriate engineering controls Use with ventilation, local exhaust ventilation or breathing protection. A washing

**Bromophen Developer (Part A) USA/Can**

		facility/water for eye and skin cleaning purposes should be present.
8.2.2. Personal protection equipment		
	Eye Protection	Wear eye protection with side protection (EN ISO 16321-1).
		
	Skin protection	Wear protective clothing and gloves: Impervious gloves (EN 374). Breakthrough time of the glove material: refer to the information provided by the gloves' producer.
		
	Respiratory protection	A suitable dust mask or dust respirator with filter type P (EN143 or EN405) may be appropriate.
		
	Thermal hazards	None known.
		
8.2.3. Environmental Exposure Controls		Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

Appearance	Solid.
	Colour : Not known.
Odour	Not known.
Odour threshold	Not known.
pH	Not known.
Melting point/freezing point	Not known.
Initial boiling point and boiling range	Not known.
Flash Point	Not applicable.
Evaporation rate	Not known.
Flammability (solid, gas)	Not known.
Upper/lower flammability or explosive limits	Not known.
Vapour pressure	Not known.
Vapour density	Not known.
Density (g/ml)	Not known.
Relative density	Not known.
Solubility(ies)	Solubility (Water) : Not known. Solubility (Other) : Not known.
Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature (°C)	Not known.
Viscosity	Not known.
Explosive properties	Not known.
Oxidising properties	Not known.

**9.2 Other information**

None.

**SECTION 10: STABILITY AND REACTIVITY****10.1 Reactivity**

None anticipated.

**10.2 Chemical Stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

No hazardous reactions known if used for its intended purpose.

**10.4 Conditions to avoid**

None anticipated.

**10.5 Incompatible materials**

Not known.

**10.6 Hazardous decomposition products**

**Bromophen Developer (Part A) USA/Can**

No hazardous decomposition products known.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects**

Acute toxicity - Ingestion	Calculation method : Harmful if swallowed. Calculation method : Calculated acute toxicity estimate (ATE) Calc ATE - 500
Acute toxicity - Skin Contact	Calculation method : Not classified. Calculation method : Calculated acute toxicity estimate (ATE) Calc ATE - 25903.69
Acute toxicity - Inhalation	Calculation method : Not classified.
Skin corrosion/irritation	Calculation method : Not classified.
Serious eye damage/irritation	Calculation method : Causes serious eye damage.
Skin sensitization data	Calculation method : May cause an allergic skin reaction.
Respiratory sensitization data	Calculation method : Not classified.
Germ cell mutagenicity	Calculation method : Suspected of causing genetic defects.
Carcinogenicity	Calculation method : Suspected of causing cancer.
Reproductive toxicity	Calculation method : Not classified.
Lactation	Calculation method : Not classified.
STOT - single exposure	Calculation method : Not classified.
STOT - repeated exposure	Calculation method : Not classified.
Aspiration hazard	Calculation method : Not classified.

**11.2 Other information**

Not known.

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity**

	Very toxic to aquatic life with long lasting effects.
Toxicity - Aquatic invertebrates	Not known.
Toxicity - Fish	Not known.
Toxicity - Algae	Not known.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

**12.2 Persistence and degradability**

Not known.

**12.3 Bioaccumulative potential**

Not known.

**12.4 Mobility in soil**

Not known.

**12.5 Other adverse effects**

None known.

**SECTION 13: DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods**

Dispose of contents in accordance with local, state or national legislation. Send to a licensed recycler, reclaimer or incinerator. Dispose of this material and its container to hazardous or special waste collection point. Dispose at suitable refuse site.

**13.2 Additional Information**

Disposal should be in accordance with local, state or national legislation.

**SECTION 14: TRANSPORT INFORMATION**

Not classified as hazardous for transport.

**14.1 UN number**

Not applicable

**14.2 UN proper shipping name**

Not applicable

**14.3 Transport hazard class(es)**

Not applicable

**14.4 Packing group**

Not applicable

**14.5 Environmental hazards**

Not classified as a Marine Pollutant.

**14.6 Special precautions for user**

**Bromophen Developer (Part A) USA/Can**

Not known

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not known

**SECTION 15: REGULATORY INFORMATION****15.1 US Federal Regulations**

Toxic and hazardous substances (29 CFR 1910; Subpart Z) Listed : 123-31-9

National emission standards for hazardous air pollutants (40 CFR 61.01) Not listed

SARA Title III Section 313 Listed : 123-31-9

TSCA (Toxic Substance Control Act) Listed : 123-31-9 (Active), 7681-57-4 (Active), 92-43-3 (Active)

CAA 602 - Ozone Depleting Substances (ODS) Not listed

**15.2 US State Regulations**

State Right to Know Lists

Proposition 65 (California)

Not listed

Massachusetts

Listed : 123-31-9, 7681-57-4

Minnesota

Listed : 123-31-9, 7681-57-4

New Jersey

Listed : 123-31-9, 7681-57-4

Pennsylvania

Listed : 123-31-9, 7681-57-4

Rhode Island

Listed : 123-31-9, 7681-57-4

**15.3 Other**

OSPAR List of Chemicals for Priority Action

Not listed

OSHA (List of Highly Hazardous Chemicals, Toxics and Reactives)

Not listed

NTP (National Toxicology Program )

Not listed

IARC (International Agency for Research on Cancer )

Listed : 123-31-9

**SECTION 16: OTHER INFORMATION**

The following sections contain revisions or new statements:

**LEGEND**

Hazard Pictogram(s)



GHS05



GHS08



GHS07

Hazard classification

Acute Tox. 4 : Acute toxicity, Category 4

Acute Tox. 4 : Acute toxicity, Category 4

Skin Sens. 1B : Skin sensitization, Category 1B

Eye Dam. 1 : Serious eye damage/irritation, Category 1

Muta. 2 : Germ cell mutagenicity, Category 2

Carc. 2 : Carcinogenicity, Category 2

Hazard Statement(s)

H302: Harmful if swallowed.

H312: Harmful in contact with skin.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H341: Suspected of causing genetic defects.

H351: Suspected of causing cancer.

Precautionary Statement(s)

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash hands and exposed skin thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P272: Contaminated work clothing must not be allowed out of the workplace.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

**Bromophen Developer (Part A) USA/Can**

P301+P312: IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.

P302+P352: IF ON SKIN: Wash with plenty of water.

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

P308+P313: IF exposed or concerned: Get medical advice/attention.

P310: Immediately call a POISON CENTRE/doctor.

P321: Specific treatment (see Medical Advice on this label).

P330: Rinse mouth.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P363: Wash contaminated clothing before reuse.

P405: Store locked up.

P501: Dispose of contents in accordance with local, state or national legislation.

## Acronyms

ATE : Acute Toxicity Estimate

CAS : Chemical Abstracts Service

LTEL : Long term exposure limit

STEL : Short term exposure limit

STOT : Specific Target Organ Toxicity

Key literature references and sources for US CFR 1910.1200  
data used to compile the SDS

## Disclaimers

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. HARMAN Technology Ltd gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. HARMAN Technology Ltd accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.