Supersedes Date 11/12/2014

# **ILFORD** PHOTO

## **HARMAN** technology Ltd

## SAFETY DATA SHEET

Microphen Developer (Part A)

## 1. IDENTIFICATION

Product Name Microphen Developer (Part A)

 Product No.
 1173875

 Internal Id
 10125

 Container Size
 10g

 Identification No.
 3077

Identified uses Photographic Developer

**Supplier** Distributor

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

Tel: 877-281-6405

Contact Distributor: sales@robertsdistributors.com

**Contact Person** 

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

## 2. HAZARD(S) IDENTIFICATION

Appearance Crystals. Powder, dust

Color White / off-white. Cream. Brown.

Odor No characteristic odor.

**GHS Pictogram** 









Signal Word

Danger

**Hazard Statements** 

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.
H400 Very toxic to aquatic life.

**Precautionary Statements** 

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.

Contains HYDROQUINONE

SODIUM METABISULPHITE

**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

#### 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.

#### **Eve Contact**

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

Health Warnings Prolonged or repeated exposure may cause severe irri

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

1-PHENYL-3-PYRAZOLIDONE 1-5%

CAS No.: 92-43-3 EC No.: 202-155-1

**GHS Classification** 

Acute Tox. 4 - H302; Aquatic Chronic 2 - H411

Boric Acid 1-5%

CAS No.: 10043-35-3 EC No.: 233-139-2

GHS Classification Repr. 1B - H360FD

HYDROQUINONE 50-70%

CAS No.: 123-31-9 EC No.: 204-617-8

**GHS Classification** 

Acute Tox. 4 - H302; Eye Dam. 1 - H318; Skin Sens. 1 - H317; Muta. 2 - H341; Carc. 2 - H351; Aquatic Acute 1 - H400

SODIUM METABISULPHITE 30-40%

CAS No.: 7681-57-4 EC No.: 231-673-0

**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.

#### 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
Boric Acid	ACGIH		2 mg/m3		6 mg/m3	A4
HYDROQUINONE	ACGIH		1 mg/m3			A3, Sen
HYDROQUINONE	PEL		2 mg/m3			
SODIUM METABISULPHITE	ACGIH		5 mg/m3			A4

COMPONENT	IDLH
HYDROQUINONE	50 mg/m3

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

Appearance Crystals. Powder, dust

**Color** White / off-white. Cream. Brown.

Odor No characteristic odor.

Solubility Soluble in water. 100%

pH-Value, Conc. Solution 5.8

## 10. STABILITY AND REACTIVITY

#### 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.

## 11. TOXICOLOGICAL INFORMATION

## 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)

Boric Acid (CAS: 10043-35-3)

Toxic Dose 1 - LD 50 >3000 mg/kg (oral rat)

#### 12. ECOLOGICAL INFORMATION

#### **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.

## **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

Boric Acid (CAS: 10043-35-3)

LC 50, 96 Hrs, Fish mg/l

600

EC 50, 48 Hrs, Daphnia, mg/l

115-153

## 13. DISPOSAL CONSIDERATIONS

## **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 handled by a licensed hazardous waste contractor.

#### 14. TRANSPORT INFORMATION

General 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.

UN No. (DOT/TDG) 3077
UN No. (IMDG) 3077
UN No. (ICAO) 3077

DOT Proper Shipping Name

UN3077, Environmentally hazardous substance, solid, n.o.s. (contains hydroquinone)

TDG Proper Shipping Name

UN3077, Environmentally hazardous substance, solid, n.o.s. (contains hydroquinone)

IMDG Class 9
ICAO Class 9

**Transport Labels** 



IMDG Pack Group III
Air Pack Group III

**Environmentally Hazardous Substance/Marine Pollutant** 



**EMS** F-A, S-F

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

Not applicable.

#### 15. REGULATORY INFORMATION

#### 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

All 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 62.34%** 

## **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** 

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.

#### 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.

## 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.

Issued By SHE.Team@harmantechnology.com

Revision Date 06/23/2015

Revision 8

Supersedes Date 11/12/2014