

ILFORD PHOTO

HARMAN technology Ltd

SAFETY DATA SHEET

Microphen Developer (Part A)

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME Microphen Developer (Part A)

PRODUCT NO. 1173875

INTERNAL ID 10125

APPLICATION Photographic Developer

SUPPLIER Distributors
 UK: HARMAN technology Ltd, Ilford
 Way, Mobberley, Cheshire, WA16
 7JL, UK Tel: 01565 650000, Fax:
 01565 872734.
 (<http://www.harmantechnology.com>)
 Australia: CR Kennedy & Co Pty Ltd,
 663 Chapel Street, South Yarra,
 Victoria 3141, Australia. Tel: 03 9823
 1555, Fax: 03 9827 7216

CONTACT PERSON UK: HS&E Advisor Dr Trevor Rhodes Tel: +44(0)1565 650000, email:
 trevor.rhodes@harmantechnology.com Australia: Contact Distributor (<http://www.crkenedy.com.au>) Tel
 +61 (0)3 9823 1555

EMERGENCY TELEPHONE Swiss Toxicological Information Centre (24 hours) Tel: +41 (0)1 251 5151, Fax: +41 (0)1 252 8833
 E-mail: stic@access.ch, Internet: www.toxi.ch

CONTAINER SIZE 25g

2 HAZARDS IDENTIFICATION

Harmful if swallowed. Risk of serious damage to eyes. May cause sensitisation by skin contact. Limited evidence of a carcinogenic effect. Very toxic to aquatic organisms. Possible risk of irreversible effects.

CLASSIFICATION (1999/45) Xn;R22. Carc. Cat. 3;R40, Muta Cat. 3;R68. Xi;R41. R43. N;R50.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification (67/548)
1-PHENYL-3-PYRAZOLIDONE	202-155-1	92-43-3	1-5%	Xn;R22 N;R51/53
Boric Acid	233-139-2	10043-35-3	1-5%	Repr. Cat. 2;R60,R61.
HYDROQUINONE	204-617-8	123-31-9	50-70%	Carc. Cat. 3;R40 Muta. Cat. 3;R68 Xn;R22 R43 Xi;R41 N;R50
SODIUM METABISULPHITE	231-673-0	7681-57-4	30-40%	Xn;R22 Xi;R41 R31

The Full Text for all R-Phrases are Displayed in Section 16

COMPOSITION COMMENTS

Hazardous according to the criteria of Worksafe Australia

4 FIRST-AID MEASURES

INHALATION

Move the exposed person to fresh air at once. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues.

INGESTION

Remove victim immediately from source of exposure. Rinse mouth thoroughly. Provide rest, warmth and fresh air. DO NOT induce vomiting. Get medical attention immediately.

Microphen Developer (Part A)

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.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Use fire-extinguishing media appropriate for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES

Avoid breathing fire vapours.

UNUSUAL FIRE & EXPLOSION HAZARDS

No unusual fire or explosion hazards noted.

SPECIFIC HAZARDS

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

PROTECTIVE MEASURES IN FIRE

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 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.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

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 PRECAUTIONS

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

STORAGE CLASS

Chemical storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
HYDROQUINONE	WEL		0.5 mg/m3			
SODIUM METABISULPHITE	WEL		5 mg/m3			

WEL = Workplace Exposure Limit.

PROTECTIVE EQUIPMENT



Microphen Developer (Part A)

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
COLOUR	White / off-white Cream Brown
ODOUR	No characteristic odour.
SOLUBILITY	Soluble in water. 100%
pH-VALUE, CONC. SOLUTION	5.8

10 STABILITY AND REACTIVITY

STABILITY

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

CONDITIONS TO AVOID

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

HAZARDOUS POLYMERISATION

Will not polymerise.

MATERIALS TO AVOID

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

HAZARDOUS DECOMPOSITION PRODUCTS

Fire or high temperatures create: Vapours/gases/fumes of: Oxides of: Sulphur. 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.

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 sensitisation 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 sensitisation 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.

Name	HYDROQUINONE
Toxic Dose 1 - LD 50	320 mg/kg (oral rat)

Microphen Developer (Part A)

Toxic Dose 2 - LD 50	>900 mg/kg (skn-rat)
Name	1-PHENYL-3-PYRAZOLIDONE
Toxic Dose 1 - LD 50	200 mg/kg (oral rat)
Name	SODIUM METABISULPHITE
Toxic Dose 1 - LD 50	1540 mg/kg (oral rat)
Name	Boric Acid
Toxic Dose 1 - LD 50	>3000 mg/kg (oral rat)

12 ECOLOGICAL INFORMATION

ECOTOXICITY

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

Name	HYDROQUINONE
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
Name	1-PHENYL-3-PYRAZOLIDONE
LC 50, 96 Hrs, FISH mg/l	>1
Name	SODIUM METABISULPHITE
LC 50, 96 Hrs, FISH mg/l	>150
EC 50, 48 Hrs, DAPHNIA, mg/l	89
IC 50, 72 Hrs, ALGAE, mg/l	48
Name	Boric Acid
LC 50, 96 Hrs, FISH mg/l	600
EC 50, 48 Hrs, DAPHNIA, mg/l	115-153

13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION

The disposal process for this product when it becomes waste, depends largely upon how much (volume) waste is generated, where the waste is generated (location) and by whom (whether in a professional or amateur or other capacity). Therefore only outline guidance can be provided. For detailed guidance and specialist advice on the disposal of this product when it becomes waste, please visit the COPPICE web site at <http://www.pic.uk.net/coppice/index.htm>. The information is relevant to both professional and amateur users.

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

LIMITED QUANTITY EXEMPTION



PROPER SHIPPING NAME	UN3077, Environmentally hazardous substance, solid, n.o.s. (contains hydroquinone)		
UN NO. ROAD	3077	ADR CLASS NO.	9(M7)
ADR CLASS	Class 9: Miscellaneous dangerous substances and articles.	ADR PACK GROUP	III
TUNNEL RESTRICTION CODE	(E)	HAZARD NO. (ADR)	90 Environmentally hazardous substance; miscellaneous dangerous substances.
ADR LABEL NO.	9	RID CLASS NO.	9

Microphen Developer (Part A)

RID PACK GROUP	III	UN NO. SEA	3077
IMDG CLASS	9	IMDG PACK GR.	III
EMS	F-A, S-F	UN NO. AIR	3077
AIR CLASS	9	AIR PACK GR.	III

15 REGULATORY INFORMATION

LABELLING



Harmful



Dangerous for the environment

CONTAINS

HYDROQUINONE
SODIUM METABISULPHITE

RISK PHRASES

- R22 Harmful if swallowed.
- R40 Limited evidence of a carcinogenic effect.
- R41 Risk of serious damage to eyes.
- R43 May cause sensitisation by skin contact.
- R50 Very toxic to aquatic organisms.
- R68 Possible risk of irreversible effects.

SAFETY PHRASES

- S2 Keep out of the reach of children.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S46 If swallowed, seek medical advice immediately and show this container or label.
- S61 Avoid release to the environment. Refer to special instructions/safety data sheets.
- S64 If swallowed, rinse mouth with water (only if the person is conscious).

EU DIRECTIVES

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC.

APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply. Worksafe Australia NOHSC 2012: Labelling of workplace substances. Australian Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP). Australian Approved Criteria for Classifying Hazardous Substances (NOHSC 1008). Australian List of Designated Hazardous Substances (NOHSC 10005). Australian National Code of Practice for the Preparation of Material safety Data Sheets (NOHSC 2011)

GUIDANCE NOTES

CHIP for everyone HSG(108).

NATIONAL REGULATIONS

Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments. Workplace Exposure Limits 2007 (EH40) The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 No 716

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

HS&E Advisor Dr Trevor Rhodes Tel: +44(0)1565 650000, email: trevor.rhodes@harmantechology.com

Microphen Developer (Part A)

REVISION DATE 15/03/2012

REV. NO./REPL. SDS 8
GENERATED

RISK PHRASES IN FULL

R31	Contact with acids liberates toxic gas.
R22	Harmful if swallowed.
R40	Limited evidence of a carcinogenic effect.
R61	May cause harm to the unborn child.
R43	May cause sensitisation by skin contact.
R60	May impair fertility.
R68	Possible risk of irreversible effects.
R41	Risk of serious damage to eyes.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R50	Very toxic to aquatic organisms.