ILFORD PHOTO

HARMAN technology Ltd

SAFETY DATA SHEET

Microphen Developer (Part B)

According to Regulation (EC) No 1907/2006, Annex II, as amended.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name Microphen Developer (Part B)

Product number 1173875

Internal identification 10120

Container size 125g

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

Identified uses Photographic Developer

1.3. Details of the supplier of the safety data sheet

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 Manager: Dr Lindsey Campbell Tel: +44(0)1565 650000, E-mail: lindsey.campbell@harmantechnology.com
Australia: Contact Distributor (http://www.crkennedy.com.au) Tel +61 (0)3 9823 1555

1.4. Emergency telephone number

Emergency telephone Australia: 1-800-557346
UK and elsewhere: +44(0) 207 858 1228

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

2.2. Label elements

Hazard statements NC Not Classified

Precautionary statements P102 Keep out of reach of children.

Supplemental label information EUH210 Safety data sheet available on request.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

Microphen Developer (Part B)

3.2. Mixtures

Sodium Sulphite		**60-100%**
CAS number: 7757-83-7	EC number: 231-821-4	REACH registration number: 01-2119537420-49-XXXX

Classification
Not Classified

Disodium Tetraborate decahydrate		**<8.5%**
CAS number: 1303-96-4	EC number: 215-540-4	REACH registration number: 01-2119490790-32-XXXX
Substance of very high concern (SVHC).		

Classification
Eye Irrit. 2 - H319
Repr. 1B - H360FD

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. 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.

4.2. 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 May cause temporary eye irritation.

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

Notes for the doctor No specific recommendations.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is non-combustible. Use fire-extinguishing media suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards No unusual fire or explosion hazards noted.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Sulphurous gases (SOx).

5.3. Advice for firefighters

Microphen Developer (Part B)

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin and eyes. Avoid inhalation of dust. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground.

6.3. 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.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. 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.

7.2. 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.

Storage class Chemical storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

Disodium Tetraborate decahydrate

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³
WEL = Workplace Exposure Limit.

Sodium Sulphite (CAS: 7757-83-7)

PNEC
- Fresh water; 1.33 mg/l
- marine water; 0.13 mg/l

Disodium Tetraborate decahydrate (CAS: 1303-96-4)

Microphen Developer (Part B)

DNEL	Workers - Inhalation; Short term local effects: 22.3 mg/m³ Workers - Inhalation; Long term local effects: 22.3 mg/m³ Workers - Dermal; Long term systemic effects: 599.6 mg/kg/day Consumer - Inhalation; Short term local effects: 22.3 mg/m³ Consumer - Inhalation; Long term local effects: 22.3 mg/m³ Consumer - Inhalation; Long term systemic effects: 6.5 mg/m³ Consumer - Dermal; Long term systemic effects: 303.5 mg/kg/day Consumer - Oral; Short term systemic effects: 1.51 mg/kg/day Consumer - Oral; Long term systemic effects: 1.51 mg/kg/day
PNEC	- Fresh water; 1.35 mg/l - marine water; 1.35 mg/l - Intermittent release; 9.1 mg/l - STP; 1.75 mg/l - Sediment (Freshwater); 1.8 mg/kg - Sediment (Marinewater); 1.8 mg/kg - Soil; 5.4 mg/kg

8.2. 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.

SECTION 9: Physical and chemical properties

9.1. 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%

9.2. Other information

Other information	Not available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	The reactivity data for this product will be typical of those for the following class of materials: Inorganic salts. See the other subsections of this section for further details.

10.2. Chemical stability

Microphen Developer (Part B)

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

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions The following materials may react with the product: Strong acids. Under normal conditions of storage and use, no hazardous reactions will occur.

10.4. Conditions to avoid

Conditions to avoid No specific requirements are anticipated under normal conditions of use.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion products may include the following substances: Sulphurous gases (SOx).

SECTION 11: Toxicological information

11.1. 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.

Reproductive toxicity

Reproductive toxicity - fertility The product contains a substance that is classified as: May damage fertility. May damage the unborn child.

Reproductive toxicity - development The product contains a substance that is classified as: May damage fertility. May damage the unborn child.

Inhalation Dust may irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact Powder may irritate skin.

Eye contact Crystalline powder. May cause temporary eye irritation. Repeated exposure may cause chronic eye irritation.

Acute and chronic health hazards Dust may irritate the respiratory system.

Route of exposure Inhalation Ingestion. Skin and/or eye contact

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

SECTION 12: Ecological information

12.1. Toxicity

Toxicity The product is not expected to be hazardous to the environment.

Ecological information on ingredients.

Sodium Sulphite

Acute aquatic toxicity

Acute toxicity - fish LC_{50}, 96 hours: 220 - 460 mg/l, Fish

Acute toxicity - aquatic invertebrates EC_{50}, 48 hours: 69 mg/l, Daphnia magna

Microphen Developer (Part B)

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not known.

SECTION 13: Disposal considerations

13.1. 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 handled by a licensed hazardous waste contractor.

Waste class 090101

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

Transport labels
No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Microphen Developer (Part B)

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). 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.
Guidance	Workplace Exposure Limits EH40. 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)

15.2. Chemical safety assessment

See the appended document: Safe Use of Mixtures Information (SUMI)

SECTION 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	Mr James Cooper, HARMAN Technology Ltd, Mobberley, Knutsford, Cheshire, WA16 7GB, ENGLAND, United Kingdom, Tel.: +44(0)1565 650000 email: james.cooper@harmantechnology.com
Revision date	16/09/2022
Revision	4
Supersedes date	12/01/2021
Hazard statements in full	H319 Causes serious eye irritation. H360FD May damage fertility. May damage the unborn child.

ILFORD PHOTO
HARMAN technology Ltd

Safe Use of Mixtures Information (SUMI)

Photoprocessing Solutions from Liquid or Powder Concentrates: Manual Processing (Professional Use)

Disclaimer

This SUMI is a generic document for communicating conditions of safe use of a product in response to the REACH obligation. This document relates only to conditions of safe use and is not specific to a product. By adding this SUMI to a specific product Safety Data Sheet (SDS), the importer/formulator declares that the mixture can safely be used following the instructions below. Following occupational health legislation, the employer of workers remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product. Derived No Effect Levels (DNEL) and Predicted No Effect Concentration (PNEC) values of substances derived from the Chemical Safety Assessment (CSA) will be given in section 8 of the SDS. The REACH registration numbers, where applicable, complete an extended product SDS.

Operational conditions

Maximum duration	1 hour per day for diluting liquid concentrates or dissolving powders (when applicable). 1 hour per day for mixing and disposal activities. 6 hours per day for application (= processing).
Frequency of exposure	Dissolving powders: 25 days per year. Diluting liquids and all other activities: 50 days per year.
Physical state	As supplied: liquid concentrates or powder concentrates. As used, after making up: aqueous working solution.
Process conditions	Covers use at ambient temperatures. Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Keep emissions below the occupational exposure limits of the ingredients specified in section 8 of the SDS. Avoid direct contact. Regular cleaning of equipment and work area.

Risk management measures

Conditions and measures related to Personal Protection Equipment (PPE), hygiene and health evaluation	Wear safety glasses with side shields. Wear appropriate chemical resistant gloves: see section 8 of the SDS. Wear lab coat or overall. No respiratory protective equipment is required under normal conditions of use, provided that adequate ventilation is in place. Eye wash station and emergency showers are recommended. Avoid breathing dust (when handling powders), mist/vapours. Avoid contact with skin, eyes and clothing. Training of worker in relation to proper use and maintenance of the PPE must be ensured. 

Good practice advice

Use personal protective equipment as required.
Wash hands before breaks and after work.
Keep good hygiene and safety practice.
Use only with adequate ventilation.
Do not eat, drink or smoke when using this product.

Environmental measures
Do not allow this material to drain into sewers/water supplies. Ensure collection and disposal with appropriately licenced waste contractor. Dispose of waste material according to Local, State, Federal and Provincial Environmental Regulations.
Use descriptors
PW-Widespread use by professional workers.
SU7-Printing and reproduction of recorded media.
PC30-Photochemicals.
PROC5-Mixing or blending in batch processes. PROC8a-Transfer of substance or mixture (charging and discharging) at non-dedicated facilities. PROC8b-Transfer of substance or mixture (charging and discharging) at dedicated facilities. PROC13-Treatment of articles by dipping and pouring.
ERC8a-Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor). ERC8b-Widespread use of reactive processing aid (no inclusion into or onto article, indoor).
Additional information on product composition
In section 2 of the SDS as well as on the label, the classification of the mixture as supplied is provided. See section 3 of the SDS for information on the product's composition. Note that this information will be for the concentrate supplied, which is used to create the working strength (WS) solution. Relevant limit values of ingredients on which the exposure assessment is based, are listed in section 8 of the SDS. The product may contain sensitizing ingredients that may cause allergic reaction to certain people. Section 2 of the SDS states these ingredients where applicable.

ILFORD PHOTO
HARMAN technology Ltd

Safe Use of Mixtures Information (SUMI)

Photoprocessing Solutions from Liquid or Powder Concentrates: Manual Processing (Consumer Use)

Disclaimer

This SUMI is a generic document for communicating conditions of safe use of a product in response to the REACH obligation. This document relates only to conditions of safe use and is not specific to a product. By adding this SUMI to a specific product Safety Data Sheet (SDS), the importer/formulator declares that the mixture can safely be used following the instructions below. Following occupational health legislation, the employer of workers remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product. Derived No Effect Levels (DNEL) and Predicted No Effect Concentration (PNEC) values of substances derived from the Chemical Safety Assessment (CSA) will be given in section 8 of the SDS. The REACH registration numbers, where applicable, complete an extended product SDS.

Operational conditions

Maximum duration	15 minutes per day for dissolving powders (when applicable). 15 minutes per day for mixing and disposal activities. 4 hours per day for application (= processing).
Frequency of exposure	Dissolving powders: 12 days per year. Diluting liquids and all other activities: 25 days per year.
Physical state	As supplied: liquid concentrate or powder concentrate. As used, after making up: aqueous working strength solution.
Process conditions	Covers use at ambient temperatures. Provide a good standard of ventilation. Avoid direct contact. Regular cleaning of equipment and work area.

Risk management measures

Conditions and measures related to Personal Protection Equipment (PPE), hygiene and health evaluation	Wear safety glasses with side shields. Wear appropriate chemical resistant gloves: see section 8 of the SDS. Wear lab coat or overall. Provide adequate ventilation. Avoid breathing dust (when handling powders), mist/vapours. Avoid contact with skin, eyes and clothing.
	

Good practice advice

Use Personal Protective Equipment as required.
Wash hands before breaks and after work.
Use only with adequate ventilation.
Do not eat, drink or smoke when using this product.

Environmental measures

Do not allow this material to drain into sewers/water supplies.
Dispose of waste material according to Local, State, Federal and Provincial Environmental Regulations.

Use descriptors
C-Consumer use.
SU7-Printing and reproduction of recorded media.
PC30-Photochemicals.
PROC5-Mixing or blending in batch processes. PROC8a-Transfer of substance or mixture (charging and discharging) at non-dedicated facilities. PROC13-Treatment of articles by dipping and pouring.
ERC8a-Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor). ERC8b-Widespread use of reactive processing aid (no inclusion into or onto article, indoor).
Additional information on product composition
In section 2 of the SDS as well as on the label, the classification of the mixture as supplied is provided. See section 3 of the SDS for information on the product's composition. Note that this information will be for the concentrate supplied, which is used to create the working strength (WS) solution. The product may contain sensitizing ingredients that may cause allergic reaction to certain people. Section 2 of the SDS states these ingredients where applicable.