ILFORD PHOTO

HARMAN technology Ltd

SAFETY DATA SHEET
2000RT Fixer

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

PRODUCT NAME	2000RT Fixer
PRODUCT NO.	1758524
INTERNAL ID	10123
APPLICATION	Photographic Fixer Solution
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
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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	5 Litre

2 HAZARDS IDENTIFICATION

Not regarded as a health or environmental hazard under current legislation.

May irritate eyes.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification (67/548)
ACETIC ACID ...%	200-580-7	64-19-7	1-5%	R10 C;R35
SODIUM METABISULPHITE	231-673-0	7681-57-4	1-5%	Xn;R22 Xi;R41 R31

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

COMPOSITION COMMENTS

Not classified as hazardous according to the criteria of Worksafe Australia

4 FIRST-AID MEASURES

INHALATION

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

INGESTION

Remove victim immediately from source of exposure. Rinse mouth thoroughly. Drink a few glasses of water or milk. DO NOT induce vomiting. Get medical attention immediately.

SKIN CONTACT

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately 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

The product is non-combustible. Use extinguishing media appropriate for surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES

Avoid breathing fire vapours.

UNUSUAL FIRE & EXPLOSION HAZARDS

No unusual fire or explosion hazards noted.

SPECIFIC HAZARDS

The product is non-combustible. If heated, harmful vapours may be formed.

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

Avoid contact with skin and eyes. Provide adequate ventilation. For personal protection, see section 8.

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. Wear necessary protective equipment. Small quantities may be flushed to drains with plenty of water. Absorb in vermiculite, dry sand or earth and place into containers. Wash contaminated area with water. Prevent discharge of larger quantity to drain.

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 above freezing. 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
SODIUM METABISULPHITE	WEL		5 mg/m3			

WEL = Workplace Exposure Limit.

PROTECTIVE EQUIPMENT

PROCESS CONDITIONS

Provide eyewash station and it is recommended that a safety shower is also available.

ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation. Must not be handled in confined space without sufficient ventilation.

RESPIRATORY EQUIPMENT

Respiratory protection not required.

HAND PROTECTION

Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials: butyl rubber (thickness >= 0.36 mm, breakthrough time > 480 min), nitrile rubber (thickness >= 0.38 mm, breakthrough time > 480 min) or neoprene (thickness >= 0.65 mm, breakthrough time > 240 min). For intermittent splash protection corresponding gloves with breakthrough times > 60 min can be used. Avoid gloves made of: natural latex. The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374.

EYE PROTECTION

Use approved safety goggles or face shield.

OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of skin contact.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid		
COLOUR	Yellow Green		
ODOUR	Slightly pungent odour		
SOLUBILITY	Soluble in water. 100%		
BOILING POINT (°C)	>100 760 mm Hg	MELTING POINT (°C)	<0
RELATIVE DENSITY	1.34 20	VAPOUR PRESSURE	- Not Known
EVAPORATION RATE	1 H2O (water)=1	pH-VALUE, CONC. SOLUTION	5.1

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 and alkalis.

HAZARDOUS POLYMERISATION

Will not polymerise.

MATERIALS TO AVOID

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

HAZARDOUS DECOMPOSITION PRODUCTS

When heated, toxic and corrosive vapours/gases may be formed. Irritating gases/vapours/fumes of: Ammonia or amines. Sulphur dioxide.

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 which comprise the mixture.

INHALATION

No specific health warnings noted.

INGESTION

No specific health warnings noted.

SKIN CONTACT

No specific health warnings noted.

EYE CONTACT

Irritating to eyes.

HEALTH WARNINGS

No specific health warnings noted.

Spray and vapour in the eyes may cause irritation and smarting.

ROUTE OF ENTRY

Ingestion. Skin and/or eye contact.

MEDICAL CONSIDERATIONS

May aggravate existing: Pre-existing eye problems.

Name	ACETIC ACID ...%
Toxic Dose 1 - LD 50	>2000 mg/kg (oral rat)
Name	SODIUM METABISULPHITE
Toxic Dose 1 - LD 50	1540 mg/kg (oral rat)
Name	Ammonium Thiosulphate
Toxic Dose 1 - LD 50	2890 mg/kg (oral rat)

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Not regarded as dangerous for the environment.

Name	ACETIC ACID ...%
LC 50, 96 Hrs, FISH mg/l	>100
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

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 handled by a licensed hazardous waste contractor.

WASTE CLASS

EU Waste Number: 090104

14 TRANSPORT INFORMATION

GENERAL	The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).
	No transport warning sign required.
ROAD TRANSPORT NOTES	Not classified for road transport
RAIL TRANSPORT NOTES	Not classified for rail transport
SEA TRANSPORT NOTES	Not classified for sea transport
AIR TRANSPORT NOTES	Not classified for air transport
ADR CLASS	Not classified for transportation.

15 REGULATORY INFORMATION

RISK PHRASES

NC	Not classified.

SAFETY PHRASES

S2	Keep out of the reach of children.
P13	Safety data sheet available for professional user on request.

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).

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

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REVISION DATE	14/10/2010
REV. NO./REPL. SDS GENERATED	4

RISK PHRASES IN FULL

R35	Causes severe burns.
R31	Contact with acids liberates toxic gas.
R10	Flammable.
R22	Harmful if swallowed.
R41	Risk of serious damage to eyes.