

ILFORD PHOTO

HARMAN technology Ltd

SAFETY DATA SHEET

2000RT Fixer/ Replenisher

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification

Product identifier

Product name 2000RT Fixer/ Replenisher

Product number 1758524

Internal identification 10123

Container size 5 Liter

Recommended use of the chemical and restrictions on use

Application Fixer Solution

Details of the supplier of the safety data sheet

Supplier

Distributor

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

Tel:877-281-6405

Contact Person

Emergency telephone number Contact Distributor: sales@robertsdistributors.com

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

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2A - H319

Environmental hazards Not Classified

Label elements

Pictogram



Signal word Warning

Hazard statements H315 Causes skin irritation.
H319 Causes serious eye irritation.

2000RT Fixer/ Replenisher

Precautionary statements

P102 Keep out of reach of children.
 P280 Wear protective clothing, gloves, eye and face protection.
 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.
 P501 Dispose of contents/ container in accordance with local regulations.

Other hazards

No information available.

3. Composition/information on ingredients

Mixtures

Ammonium Thiosulphate CAS number: 7783-18-8	30-60%
Classification Not Classified	
SODIUM BISULPHITE% CAS number: 7631-90-5	1-5%
Classification Acute Tox. 4 - H302	
Acetic acid CAS number: 64-19-7	< 2%
Classification Flam. Liq. 3 - H226 Skin Corr. 1A - H314 Eye Dam. 1 - H318	

The full text for all hazard statements is displayed in Section 16.

4. First-aid measures

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. Get medical attention if irritation persists after washing.

Most important symptoms and effects, both acute and delayed

Inhalation	No specific symptoms known.
Ingestion	No specific symptoms known.
Skin contact	This product is moderately irritating.

2000RT Fixer/ Replenisher

Eye contact Irritating.

Indication of immediate medical attention and special treatment needed

Notes for the doctor No specific recommendations.

5. Fire-fighting measures

Extinguishing media

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

Special hazards arising from the substance or mixture

Specific hazards The product is non-combustible. No unusual fire or explosion hazards noted.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Oxides of nitrogen. Oxides of sulfur. Ammonia.

Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapors.

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.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Collect and dispose of spillage as indicated in Section 13.

Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing, gloves, eye and face protection.
Small Spillages: Flush away spillage with plenty of water.
Large Spillages: Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

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

7. Handling and storage

Precautions for safe handling

Usage precautions Provide adequate ventilation. Avoid spilling. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Read and follow manufacturer's recommendations.

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 above 0°C. Store at temperatures not exceeding 30°C.

Storage class Chemical storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

2000RT Fixer/ Replenisher

8. Exposure Controls/personal protection

Control parameters

Occupational exposure limits

SODIUM BISULPHITE%

Long-term exposure limit (8-hour TWA): ACGIH 5 mg/m³
A4

Acetic acid

Long-term exposure limit (8-hour TWA): OSHA 10 ppm 25 mg/m³

Long-term exposure limit (8-hour TWA): ACGIH 10 ppm 25 mg/m³

Short-term exposure limit (15-minute): ACGIH 15 ppm 37 mg/m³

ACGIH = American Conference of Governmental Industrial Hygienists.

OSHA = Occupational Safety and Health Administration.

A4 = Not Classifiable as a Human Carcinogen.

Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. This product must not be handled in a confined space without adequate 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 suitable protective clothing as protection against splashing or contamination.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Liquid.
Color	Green-yellow.
Odor	Slight pungent.
pH	pH (concentrated solution): 5.1
Melting point	<0°C
Initial boiling point and range	>100°C @ 760 mm Hg
Evaporation rate	~ 1 H ₂ O (water)=1
Vapor pressure	Data lacking.
Relative density	1.34 @ 20°C
Solubility(ies)	Soluble in water. 100%
Other information	Not available.

10. Stability and reactivity

2000RT Fixer/ Replenisher

Reactivity	See the other subsections of this section for further details.
Stability	Stable under the prescribed storage conditions. No particular stability concerns.
Possibility of hazardous reactions	Under normal conditions of storage and use, no hazardous reactions will occur.
Conditions to avoid	Avoid excessive heat for prolonged periods of time. Avoid contact with acids and alkalis.
Materials to avoid	Strong acids. Strong alkalis. Avoid contact with other photographic solutions and/or cleaning compounds.
Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Irritating gases or vapors. Ammonia or amines. Sulfur dioxide. Oxides of carbon. Oxides of nitrogen.

11. Toxicological information

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.
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Acute toxicity - oral

ATE oral (mg/kg)	12,834.33
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Inhalation	No specific health hazards known.
Ingestion	No specific health hazards known.
Skin Contact	This product is moderately irritating.
Eye contact	Irritating to eyes.
Acute and chronic health hazards	No known chronic or acute health risks.
Route of entry	Ingestion. Skin and/or eye contact

12. Ecological Information

Ecotoxicity	Not regarded as dangerous for the environment.
Toxicity	Not considered toxic to fish.

Acetic acid

Acute toxicity - fish	LC ₅₀ , 96 hours: >100 mg/l, Fish
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Persistence and degradability

Persistence and degradability	No data available.
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Bioaccumulative potential

Bio-Accumulative Potential	No data available on bioaccumulation.
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Mobility in soil

Mobility	The product is soluble in water.
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2000RT Fixer/ Replenisher

Other adverse effects

Other adverse effects The product may contribute to an excessive enrichment of the aquatic environment with nutrients.

13. Disposal considerations

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 be handled by a licensed hazardous waste contractor.

14. Transport information

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

UN Number

Not applicable.

UN proper shipping name

Not applicable.

Transport hazard class(es)

Not applicable.

Transport labels

No transport warning sign required.

DOT transport labels

No transport warning sign required.

Packing group

Not applicable.

Environmental hazards

Environmentally Hazardous Substance

No.

Special precautions for user

Not applicable.

DOT TIH Zone Not applicable.

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

15. Regulatory information

US State Regulations

State Regulations Comments No information available.

Inventories

US - TSCA 12(b) Export Notification

2000RT Fixer/ Replenisher

Ammonium Thiosulphate

Water

Sodium Acetate

SODIUM BISULPHITE%

Acetic acid

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 Dangerous Properties of Industrial Chemicals, 6.edition, N.Sax, 1984. Material Safety Data Sheet, Misc. manufacturers.
Issued by	SHE.Team@harmantechnology.com
Revision date	11/20/2017
Revision	2
Supersedes date	14/05/2015
Hazard statements in full	H226 Flammable liquid and vapor. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation.