ILFORD PHOTO

HARMAN technology Ltd

SAFETY DATA SHEET 2000RT FIXER 1+4

This SDS is not mandated under REACH Regulation (EC) No 1907/2006 and is provided for information only.

This SDS relates to the product after it has been prepared for use in accordance with our recommendations. Because HARMAN technology Ltd. does not supply the solution ready for use, we are not obliged to provide this SDS. However, we do so in order to help users to use the product safely and assess correctly the risks involved. Users should also have and refer to the SDS(s) for the concentrate(s) from which the working strength solution is prepared.

SECTION 1: Identification of the substance/mixture and of the company/undertaking			
1.1. Product identifier			
Product name	2000RT FIXER 1+4		
Internal identification	10156		
1.2. Relevant identified uses	1.2. Relevant identified uses of the substance or mixture and uses advised against		
Identified uses	Photographic Fixer Solution		
1.3. Details of the supplier of	the safety data sheet		
Supplier	HARMAN technology Ltd Ilford Way Mobberley Knutsford Cheshire WA16 7JL http:/www.harmantechnology.com Tel: +44(0)1565 650000 Fax: +44(0)1565 872734		
Contact person	HS&E Advisor Dr Trevor Rhodes Tel: +44(0)1565 650000, email: trevor.rhodes@harmantechnology.com		
1.4. Emergency telephone number			
Emergency telephone	See Safety Data Sheet of appropriate concentrate for details.		
SECTION 2: Hazards identific	cation		
2.1. Classification of the subs	tance or mixture		
Classification (EC 1272/2008)	<u>)</u>		
Physical hazards	Not Classified		
Health hazards	Not Classified		
Environmental hazards	Not Classified		
2.2. Label elements			
Hazard statements	NC Not Classified		
2.3. Other hazards			
No information available.			
SECTION 3: Composition/information on ingredients			

3.2. Mixtures		
Ammonium Thiosulphate		10-159
CAS number: 7783-18-8	EC number: 231-982-0	REACH registration number: 01- 2119537325-41-XXXX
Classification Not Classified	Classification (67/548/EEC or 1999/45/EC)	
The Full Text for all R-Phrases	s and Hazard Statements are Displayed in Sec	ction 16.
SECTION 4: First aid measure	98	
4.1. Description of first aid me	asures	
Inhalation	Unlikely route of exposure as the product do	pes not contain volatile substances.
Ingestion	Rinse mouth thoroughly with water.	
Skin contact	Rinse immediately with plenty of water.	
Eye contact	Remove any contact lenses and open eyelic minutes. Get medical attention if any discom	ds wide apart. Continue to rinse for at least 15 nfort continues.
4.2. Most important symptoms	and effects, both acute and delayed	
Inhalation	No specific symptoms known.	
Ingestion	No specific symptoms known.	
Skin contact	May cause slight irritation.	
Eye contact	May cause temporary eye irritation.	
4.3. Indication of any immedia	te medical attention and special treatment nee	eded
Notes for the doctor	No specific recommendations.	
SECTION 5: Firefighting meas	sures	
5.1. Extinguishing media		
Suitable extinguishing media	The product is not flammable. Use fire-extin	guishing media suitable for the surrounding fire.
5.2. Special hazards arising fro	om the substance or mixture	
Specific hazards	No unusual fire or explosion hazards noted.	
Hazardous combustion products	Thermal decomposition or combustion produce Irritating gases or vapours. Oxides of: Sulph	
5.3. Advice for firefighters		
Protective actions during firefighting	No specific firefighting precautions known.	
SECTION 6: Accidental releas	se measures	
6.1. Personal precautions, pro	tective equipment and emergency procedures	5
Personal precautions	Avoid contact with skin and eyes.	
6.2. Environmental precaution	<u>s</u>	
Environmental precautions	Avoid discharge into drains.	
6.3. Methods and material for	containment and cleaning up	

Methods for cleaning up	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 sto	rage	
7.1. Precautions for safe hand	lling	
Usage precautions	Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation.	
7.2. Conditions for safe storage, including any incompatibilities		
Storage precautions	Keep out of reach of children.	
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 Contro	Is/personal protection	
8.1. Control parameters		
Ingredient comments	No substances with occupational exposure limits are present at levels above the threshold for disclosure.	
	Ammonium Thiosulphate (CAS: 7783-18-8)	
DNEL	General population - Inhalation; Long term systemic effects: 104 mg/m ³	
PNEC	- Fresh water; 0.78 mg/l - Marine water; 0.08 mg/l	
8.2. 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	Respiratory protection not required.	
SECTION 9: Physical and Chemical Properties		
9.1. Information on basic physical and chemical properties		
Appearance	Liquid. Soluble in water.	
Colour	Colourless to pale yellow.	

pН

pH (diluted solution): ca 5.15 (made up to 1+4 as directed)

Melting point	<0°C
Initial boiling point and range	>100°C @ 760 mm Hg
Evaporation rate	1 H2O (water)=1
Vapour pressure	No information available.
Relative density	~ 1.07 @ 20°C
Solubility(ies)	Soluble in water.
9.2. Other information	
Other information	Not available.
SECTION 10: Stability and rea	activity
10.1. Reactivity	
Reactivity	The reactivity data for this product will be typical of those for the following class of materials: Ammonium salts.
10.2. Chemical stability	
Stability	Stable at normal ambient temperatures and when used as recommended.
10.3. Possibility of hazardous reactions	
Possibility of hazardous reactions	Under normal conditions of storage and use, no hazardous reactions will occur.
10.4. Conditions to avoid	
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
10.5. Incompatible materials	
Materials to avoid	Avoid contact with acids and alkalis. Avoid contact with other photographic solutions and/or cleaning compounds.
10.6. Hazardous decomposition	on products
Hazardous decomposition products	Contact with alkalis may produce: Ammonia. Thermal decomposition or combustion products may include the following substances: Irritating gases or vapours. Oxides of: Sulphur. Carbon. Nitrogen. Sodium.
SECTION 11: Toxicological in	formation
11.1. Information on toxicologi	ical 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.
Inhalation	No specific health hazards known.
Ingestion	No specific health hazards known.
Skin contact	May cause irritation.
Eye contact	May cause irritation.
Route of entry	Skin and/or eye contact
SECTION 12: Ecological Information	

12.1. Toxicity

Toxicity	The product is not expected to be hazardous to the environment.
12.2. Persistence and degrad	ability
Persistence and degradability	There are no data on the degradability of this product.
12.3. Bioaccumulative potenti	
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 vPv	B 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	None known.
SECTION 13: Disposal consid	derations
13.1. Waste treatment method	ds
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. EU Waste Number: 090104
SECTION 14: Transport inform	mation
General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).
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
14.1. UN number	
Not applicable.	
14.2. UN proper shipping nam	ne la
Not applicable.	
14.3. Transport hazard class(es)	
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

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

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.

Guidance

vvorkplace Exposure Limits EH40.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for this mixture. See SUMI (Safe Use of Mixtures Information document) attached to Safety Data Sheet of appropriate concentrate.

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	HS&E Advisor Dr Trevor Rhodes Tel: +44(0)1565 650000, email: trevor.rhodes@harmantechnology.com
Revision date	18/08/2017
Revision	2
Supersedes date	15/10/2015