# **ILFORD** PHOTO

## HARMAN technology Ltd

## SAFETY DATA SHEET 2150XL FIXER 1+3.67

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	2150XL FIXER 1+3.67
Internal identification	10136
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 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
2.3. Other hazards	
No information available.	
SECTION 3: Composition/information on ingredients	

#### 3.2. Mixtures

Ingestion Rin: Skin contact Rin:	- EC number: 231-548-0 Class Xn;R	10-15% REACH registration number: 01- 2119537325-41-XXXX sification (67/548/EEC or 1999/45/EC) 1-2% sification (67/548/EEC or 1999/45/EC)
Classification         Not Classified         SODIUM BISULPHITE%         CAS number: 7631-90-5         Classification         Acute Tox. 4 - H302         The Full Text for all R-Phrases and         SECTION 4: First aid measures         4.1. Description of first aid measures         Inhalation       Unlingestion         Skin contact       Ring	Class - EC number: 231-548-0 Class Xn;R	2119537325-41-XXXX sification (67/548/EEC or 1999/45/EC) 1-2% sification (67/548/EEC or 1999/45/EC)
Not Classified         SODIUM BISULPHITE%         CAS number: 7631-90-5         Classification         Acute Tox. 4 - H302         The Full Text for all R-Phrases and         SECTION 4: First aid measures         4.1. Description of first aid measures         Inhalation       Unlingestion         Skin contact       Rin:	- EC number: 231-548-0 Class Xn;R	1-2% sification (67/548/EEC or 1999/45/EC)
SODIUM BISULPHITE%         CAS number: 7631-90-5         Classification         Acute Tox. 4 - H302         The Full Text for all R-Phrases and         SECTION 4: First aid measures         4.1. Description of first aid measures         Inhalation       Unline         Ingestion       Ring         Skin contact       Ring	<b>Clas</b> Xn;R	sification (67/548/EEC or 1999/45/EC)
CAS number: 7631-90-5  Classification Acute Tox. 4 - H302  The Full Text for all R-Phrases and SECTION 4: First aid measures 4.1. Description of first aid measures Inhalation Unli Ingestion Rin: Skin contact Rin:	<b>Clas</b> Xn;R	sification (67/548/EEC or 1999/45/EC)
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SECTION 4: First aid measures         4.1. Description of first aid measure         Inhalation       Unlight         Ingestion       Ring         Skin contact       Ring	Hazard Statements are Displaye	
4.1. Description of first aid measureInhalationUnliIngestionRinaSkin contactRina		d in Section 16.
Inhalation Unlingestion Rina Skin contact Rina		
Ingestion Rin: Skin contact Rin:	S	
Skin contact Rin:	_ ikely route of exposure as the pro	oduct does not contain volatile substances.
	se mouth thoroughly with water.	
Eve contact Rer	se immediately with plenty of wat	er.
-	nove any contact lenses and ope utes. Get medical attention if any	en eyelids wide apart. Continue to rinse for at least 15 discomfort 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	y cause slight irritation.	
Eye contact May	y cause temporary eye irritation.	
4.3. Indication of any immediate me	edical attention and special treatm	nent needed
Notes for the doctor No	specific recommendations.	
SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media The	e product is not flammable. Use fi	re-extinguishing media suitable for the surrounding fire.
5.2. Special hazards arising from th	e substance or mixture	
Specific hazards No	unusual fire or explosion hazards	noted.
	-	on products may include the following substances: f: Sulphur. Carbon. Nitrogen. Sodium.
5.3. Advice for firefightersProtective actions duringNofirefighting		nown.
SECTION 6: Accidental release me	specific firefighting precautions ki	

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin and eyes.	
6.2. Environmental precaution	s	
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 section	ns	
Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13.	
SECTION 7: Handling and sto	prage	
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	ls/personal protection	
8.1. Control parameters Occupational exposure limits SODIUM BISULPHITE% Long-term exposure limit (8-hour TWA): WEL 5 mg/m <sup>3</sup> WEL = Workplace Exposure Limit		
Ammonium Thiosulphate (CAS: 7783-18-8)		
DNEL	General population - Inhalation; Long term systemic effects: 104 mg/m <sup>3</sup>	
PNEC	- Fresh water; 0.78 mg/l - Marine water; 0.08 mg/l	

#### 8.2. Exposure controls





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.
Odour	Slight.
рН	pH (diluted solution): ca 5.15 (made up as directed)
Melting point	℃>0
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 reactivity	
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 decompositio	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 information	
11.1. Information on toxicologi	cal 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.
Acute toxicity - oral	

ATE oral (mg/kg) 47,984.64

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 Infor	mation
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	al
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	
12.0. Outer auverse elleuls	
Other adverse effects	None known.
Other adverse effects	lerations
Other adverse effects SECTION 13: Disposal consid	lerations
Other adverse effects SECTION 13: Disposal consid 13.1. Waste treatment method	derations ds 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
Other adverse effects SECTION 13: Disposal consid 13.1. Waste treatment method Disposal methods	derations ds 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
Other adverse effects SECTION 13: Disposal consid 13.1. Waste treatment method Disposal methods SECTION 14: Transport inform	derations ds 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 mation The product is not covered by international regulations on the transport of dangerous goods
Other adverse effects SECTION 13: Disposal consid 13.1. Waste treatment method Disposal methods SECTION 14: Transport inform General	derations         ds         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         mation         The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).
Other adverse effects SECTION 13: Disposal consid 13.1. Waste treatment method Disposal methods SECTION 14: Transport inform General Road transport notes	derations         ds         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         mation         The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).         Not classified for road transport
Other adverse effects SECTION 13: Disposal consid 13.1. Waste treatment method Disposal methods SECTION 14: Transport inform General Road transport notes Rail transport notes	derations         ds         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         mation         The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).         Not classified for road transport         Not classified for rail transport
Other adverse effects SECTION 13: Disposal consid 13.1. Waste treatment method Disposal methods SECTION 14: Transport inform General Road transport notes Rail transport notes Sea transport notes	derations         ds         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         mation         The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).         Not classified for road transport         Not classified for sea transport
Other adverse effects SECTION 13: Disposal consid 13.1. Waste treatment method Disposal methods SECTION 14: Transport inform General Road transport notes Rail transport notes Sea transport notes Air transport notes	derations         ds         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         mation         The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).         Not classified for road transport         Not classified for sea transport

#### 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.

110.

#### 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	<ul> <li>Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18</li> <li>December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).</li> <li>Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16</li> <li>December 2008 on classification, labelling and packaging of substances and mixtures (as amended).</li> <li>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.</li> </ul>
Guidanaa	Workplace Expecting Limits EH40

#### Guidance

Workplace 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

Hazard statements in full

H302 Harmful if swallowed.