# **ILFORD** PHOTO

## HARMAN technology Ltd

#### SAFETY DATA SHEET 2150XL DEVELOPER 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 DEVELOPER 1+3.67	
Internal identification	10135	
1.2. Relevant identified uses of	of the substance or mixture and uses advised against	
Identified uses	Photographic Developer Solution	
1.3. Details of the supplier of t	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 nu	mber	
Emergency telephone	See Safety Data Sheet of appropriate concentrate for details.	
SECTION 2: Hazards identification		
2.1. Classification of the subs	tance or mixture	
Classification (EC 1272/2008)		
Physical hazards	Not Classified	
Health hazards	Not Classified	
Environmental hazards	Not Classified	
2.2. Label elements		
Hazard statements	EUH208 Contains HYDROQUINONE, 1-Phenyl-4-methyl-4-hydroxymethyl-3-pyrazolidone. May produce an allergic reaction.	
2.3. Other hazards		
No information available.		

3.2. Mixtures				
Potassium Carbonate				1-59
CAS number: 584-08-7	EC number: 209-52	9-3	REACH registration number: 01-	
			2119532646-36-0000	
Classification		Classificatio	n (67/548/EEC or 1999/45/EC)	
Skin Irrit. 2 - H315		Xi;R36/37/38		
Eye Irrit. 2 - H319		,		
STOT SE 3 - H335				
HYDROQUINONE				<19
CAS number: 123-31-9	EC number: 204-61	7-8	REACH registration number: 01-	
			2119524016-51-XXXX	
M factor (Acute) = 10				
Classification		Classification	n (67/548/EEC or 1999/45/EC)	
Acute Tox. 4 - H302			;R40 Muta. Cat. 3;R68 Xn;R22 R43 Xi;R41	
Eye Dam. 1 - H318		N;R50		
Skin Sens. 1 - H317		11,130		
Muta. 2 - H341				
Carc. 2 - H351				
Aquatic Acute 1 - H400				
pentasodium				<19
(carboxylatomethyl)iminobis	(ethylenenitrilo)tetraacetate			
CAS number: 140-01-2	EC number: 205-39	1-3	REACH registration number: 01-	
			2119474445-33-XXXX	
Classification		Classificatio	n (67/548/EEC or 1999/45/EC)	
Acute Tox. 4 - H332			or. Cat. 3;R63.	
Repr. 2 - H361fd			51. Odt. 0,100.	
STOT RE 2 - H373				
1-Phenyl-4-methyl-4-hydrox	ymethyl-3-pyrazolidone			<19
CAS number: 13047-13-7	EC number: 235-92	0-3		
Classification		Classification	n (67/548/EEC or 1999/45/EC)	
Acute Tox. 4 - H302		Xn;R22. N;R		
Skin Sens. 1 - H317		. ,		
Aquatic Chronic 2 - H411				
The Full Text for all R-Phrase	es and Hazard Statements are Dis	splayed in Sec	ction 16.	
SECTION 4: First aid measur	es			
I.1. Description of first aid me	easures			
nhalation	Unlikely route of exposure as t	he product do	es 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 eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any 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 cause skin sensitisation or allergic reactions in sensitive individuals.	
Eye contact	May cause temporary eye irritation.	
4.3. Indication of any immedia	te medical attention and special treatment needed	
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-extinguishing media suitable for the surrounding fire.	
5.2. Special hazards arising fr	om 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: Irritating gases or vapours. Oxides of: Sulphur. Carbon. Nitrogen. Potassium.	
5.3. Advice for firefighters		
Protective actions during firefighting	No specific firefighting precautions known.	
SECTION 6: Accidental release	se measures	
6.1. Personal precautions, pro	tective equipment and emergency procedures	
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 section	ns	
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 handling		
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.	
7.2 Creatile and $uec(a)$		
7.3. Specific end use(s)		

#### SECTION 8: Exposure Controls/personal protection

#### 8.1. Control parameters

#### Occupational exposure limits

#### HYDROQUINONE

Long-term exposure limit (8-hour TWA): WEL 0.5 mg/m<sup>3</sup> WEL = Workplace Exposure Limit

#### HYDROQUINONE (CAS: 123-31-9)

DNEL	Industry/Professional - Dermal; Long term systemic effects: 128 mg/kg/day Industry/Professional - Inhalation; Long term systemic effects: 7 mg/m <sup>3</sup> Industry/Professional - Inhalation; Long term local effects: 1 mg/m <sup>3</sup> General population - Dermal; Long term systemic effects: 64 mg/kg/day General population - Inhalation; Long term systemic effects: 1.74 mg/m <sup>3</sup> General population - Inhalation; Long term local effects: 0.5 mg/m <sup>3</sup>		
PNEC	- Water; 0.000114 mg/l - Marine water; 0.0000114 mg/l - Sediment (Freshwater); 0.00098 mg/kg - Sediment (Marinewater); 0.000097 mg/kg - Intermittent release; 0.00134 mg/l - Soil; 0.000129 mg/kg - STP; 0.71 mg/l		
ре	ntasodium (carboxylatomethyl)iminobis(ethylenenitrilo)tetraacetate (CAS: 140-01-2)		
DNEL	Workers - Inhalation; Long term systemic effects: 1.5 mg/m <sup>3</sup>		
PNEC	<ul> <li>Fresh water; 6.4 mg/l</li> <li>Marine water; 0.64 mg/l</li> <li>Water, Intermittent release; 3.1 mg/l</li> <li>STP; 51 mg/l</li> <li>Sediment (Freshwater); 25.1 mg/kg</li> <li>Sediment (Marinewater); 2.51 mg/kg</li> <li>Soil; 1.26 mg/kg</li> </ul>		
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 Cl	SECTION 9: Physical and Chemical Properties		

### 9.1. Information on basic physical and chemical properties

Appearance	Liquid.	
Colour	Colourless.	
Odour	No characteristic odour.	
рН	рН са. 10.4	
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	~ 1.05 @ 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	There are no known reactivity hazards associated with this product.	
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. Avoid contact with other photographic solutions and/or cleaning compounds.	
10.6. Hazardous decomposition	on products	
Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Irritating gases or vapours. Oxides of: Sulphur. Carbon. Nitrogen. Potassium.	
SECTION 11: Toxicological in	formation	
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.	
Germ cell mutagenicity Genotoxicity - in vivo	The product contains a substance that is classified as: Suspected of causing genetic defects.	
Carcinogenicity Carcinogenicity	The product contains a substance that is classified as: Suspected of causing cancer.	
Reproductive toxicity		

Reproductiv	e toxicity - fertility		duct contains a substance that is classified as: Suspected of damaging fertility. ed of damaging the unborn child.
Reproductiv developmen	•	-	duct contains a substance that is classified as: Suspected of damaging fertility. ed of damaging the unborn child.
Specific targ	get organ toxicity -	repeated	exposure
STOT - repe	eated exposure	-	duct contains a substance that is classified as: May cause damage to organs through ed or repeated exposure.
Inhalation		No spec	ific health hazards known.
Ingestion		No spec	ific health hazards known.
Skin contact	t		duct contains a small amount of sensitising substance. May cause sensitisation or reactions in sensitive individuals.
Eye contact		Vapour	or spray in the eyes may cause irritation and smarting.
Acute and c hazards	hronic health	Vapour	or spray in the eyes may cause irritation and smarting.
Route of entry Skin and		Skin and	l/or eye contact
			HYDROQUINONE
	Acute toxicity - or	al	
	Acute toxicity ora mg/kg)	I (LD₅₀	375.0
	Species		Rat
	ATE oral (mg/kg)		375.0
	Carcinogenicity		
	IARC carcinogen	icity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
SECTION 12: Ecological Information			

#### 12.1. Toxicity

Toxicity

The product contains a substance that is very toxic to aquatic organisms. At the levels that are present, the product is not considered to be hazardous to the environment.

#### HYDROQUINONE

Acute aquatic toxicity	
LE(C)50	0.01 < L(E)C50 ≤ 0.1
M factor (Acute)	10
Acute toxicity - fish	LC₅₀, 96 hours: 0.10-0.18 (Fathead Minnow) mg/l, Algae
Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 0.05 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC₅₀, 72 hours: 1.0 mg/l, Fish

#### 12.2. Persistence and degradability

**Persistence and degradability** There are no data on the degradability of this product.

Persistence and degradability	There are no data on the degradability of this product.	
12.3. Bioaccumulative potentia	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 vPvI	3 assessment	
Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.	
	HYDROQUINONE	
Results of PBT a assessment	<b>nd vPvB</b> This substance is not classified as PBT or vPvB according to current EU criteria.	
12.6. Other adverse effects		
Other adverse effects	None known.	
SECTION 13: Disposal consid	lerations	
13.1. Waste treatment method	ls	
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: 090101	
SECTION 14: Transport inform	nation	
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 name		
Not applicable.		
14.3. Transport hazard class(es)		
<b>Transport labels</b> 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

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.
Directive 91/689/EEC on hazardous waste with amendments.

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	17/09/2015	

Hazard statements in full	H302 Harmful if swallowed.
	H315 Causes skin irritation.
	H317 May cause an allergic skin reaction.
	H318 Causes serious eye damage.
	H319 Causes serious eye irritation.
	H332 Harmful if inhaled.
	H335 May cause respiratory irritation.
	H341 Suspected of causing genetic defects.
	H351 Suspected of causing cancer.
	H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
	H373 May cause damage to organs through prolonged or repeated exposure.
	H400 Very toxic to aquatic life.
	H411 Toxic to aquatic life with long lasting effects.
	EUH208 Contains HYDROQUINONE, 1-Phenyl-4-methyl-4-hydroxymethyl-3-pyrazolidone.
	May produce an allergic reaction.