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# HARMAN technology Ltd

# SAFETY DATA SHEET

Ilfotec DD-X Film Developer

According to Regulation (EC) No 1907/2006, Annex II, as amended.

SECTION 1: Identification of t	SECTION 1: Identification of the substance/mixture and of the company/undertaking		
1.1. Product identifier			
Product name	Ilfotec DD-X Film Developer		
Product number	1155055		
Internal identification	10153		
Container size	1 Litre		
1.2. Relevant identified uses	of the substance or mixture and uses advised against		
Identified uses	Photographic Developer Solution		
1.3. Details of the supplier of	the safety data sheet		
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		
Contact person	UK: HS&E Manager: Dr Lindsey Campbell Tel: +44(0)1565 650000, E-mail: lindsey.campbell@harmantechnology.com Australia: Contact Distributor (http://www.crkennedy.com.au) Tel +61 (0)3 9823 1555		
1.4. Emergency telephone nu	mber		
Emergency telephone	Australia: 1-800-557346 UK and elsewhere: +44(0) 207 858 1228		
SECTION 2: Hazards identific	cation		
2.1. Classification of the subs	tance or mixture		
Classification (EC 1272/2008)	-		
Physical hazards	Not Classified		
Health hazards	Eye Dam. 1 - H318 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 2 - H351		
Environmental hazards	Aquatic Acute 1 - H400		
2.2. Label elements Hazard pictograms			
Signal word	Danger		

Hazard statements	H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H341 Suspected of causing genetic defects. H351 Suspected of causing cancer. H400 Very toxic to aquatic life.
Precautionary statements	<ul> <li>P101 If medical advice is needed, have product container or label at hand.</li> <li>P273 Avoid release to the environment.</li> <li>P280 Wear protective clothing, gloves, eye and face protection.</li> <li>P302+P352 IF ON SKIN: Wash with plenty of water.</li> <li>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P405 Store locked up.</li> <li>P501 Dispose of contents/ container in accordance with local regulations.</li> </ul>
Contains	HYDROQUINONE

### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

3.2. Mixtures			
2,2'-OXYBISETHANOL			1-5%
CAS number: 111-46-6	EC number: 203-872-2	REACH registration number: 01- 2119457857-21-XXXX	
Classification Acute Tox. 4 - H302			
HYDROQUINONE			1-5%
CAS number: 123-31-9	EC number: 204-617-8	REACH registration number: 01- 2119524016-51-XXXX	
M factor (Acute) = 10			
<b>Classification</b> Acute Tox. 4 - H302 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 2 - H351 Aquatic Acute 1 - H400			
Disodium Tetraborate decahydrate			1-5%
CAS number: 1303-96-4	EC number: 215-540-4	REACH registration number: 01- 2119490790-32-XXXX	1-070
Substance of very high concern (SVHC).			
<b>Classification</b> Eye Irrit. 2 - H319 Repr. 1B - H360FD			

Boric Acid		1-5%
CAS number: 10043-35-3	EC number: 233-139-2	REACH registration number: 01- 2119486683-25-XXXX
Substance of very high cond	cern (SVHC).	
Classification Repr. 1B - H360FD		
pentasodium (carboxylatomethyl)iminobis	(ethylenenitrilo)tetraacetate	<1%
CAS number: 140-01-2	EC number: 205-391-3	REACH registration number: 01- 2119474445-33-XXXX
Classification Acute Tox. 4 - H332 Repr. 2 - H361fd STOT RE 2 - H373		
1-Phenyl-4-methyl-4-hydrox	ymethyl-3-pyrazolidone	<1%
CAS number: 13047-13-7	EC number: 235-920-3	
<b>Classification</b> Acute Tox. 4 - H302 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411		
The Full Text for all R-Phrase	es and Hazard Statements are Displayed in Sect	tion 16.
SECTION 4: First aid measu	res	
4.1. Description of first aid m	easures	
Inhalation	Move affected person to fresh air at once. Ge	t medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Get medi	cal 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. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after washing.	
4.2. Most important symptom	s and effects, both acute and delayed	
Inhalation	No specific symptoms known.	
Ingestion	No specific symptoms known.	
Skin contact	May cause sensitisation by skin contact.	
Eye contact	Irritation of eyes and mucous membranes.	
4.3. Indication of any immedi	ate medical attention and special treatment need	ded
Notes for the doctor	No specific recommendations.	
SECTION 5: Firefighting mea	asures	

### 5.1. Extinguishing media

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

5.2. Special hazards arising fro	om 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. Sulphur. Nitrogen. Sodium. Potassium.	
5.3. Advice for firefighters		
Protective actions during firefighting	Avoid breathing fire gases or vapours.	
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.	
SECTION 6: Accidental releas	e measures	
6.1. Personal precautions, pro	tective equipment and emergency procedures	
Personal precautions	Avoid contact with skin and eyes. Provide adequate ventilation. For personal protection, see Section 8.	
6.2. Environmental precaution	<u>S</u>	
Environmental precautions	Do not discharge into drains or watercourses or onto the ground. Collect and dispose of spillage as indicated in Section 13.	
6.3. 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.	
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 hand	ling	
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.	
7.2. Conditions for safe storag	e, 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.	
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 controls/Personal protection		
8.1. Control parameters Occupational exposure limits		

2,2'-OXYBISETHANOL

Long-term exposure limit (8-hour TWA): WEL 23 ppm 101 mg/m<sup>3</sup>

#### HYDROQUINONE

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

#### Disodium Tetraborate decahydrate

Long-term exposure limit (8-hour TWA): WEL 5 mg/m<sup>3</sup> WEL = Workplace Exposure Limit.

#### 2,2'-OXYBISETHANOL (CAS: 111-46-6)

DNEL	Consumer - Dermal; Long term systemic effects: 53 mg/kg/day Industry - Dermal; Long term systemic effects: 106 mg/kg/day Consumer - Inhalation; Long term local effects: 12 mg/m³ Industry - Inhalation; Long term local effects: 60 mg/m³ - Soil; 1.53 mg/kg - STP; 199.5 mg/l - Fresh water; 10 mg/l - marine water; 1 mg/l - Water, Intermittent release; 10 mg/l - Sediment (Freshwater); 20.9 mg/kg - Sediment (Marinewater); 2.09 mg/kg
	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	<ul> <li>Water; 0.000114 mg/l</li> <li>marine water; 0.0000114 mg/l</li> <li>Sediment (Freshwater); 0.00098 mg/kg</li> <li>Sediment (Marinewater); 0.000097 mg/kg</li> <li>Intermittent release; 0.00134 mg/l</li> <li>Soil; 0.000129 mg/kg</li> <li>STP; 0.71 mg/l</li> </ul> Disodium Tetraborate decahydrate (CAS: 1303-96-4)
DNEL	Workers - Inhalation; Short term local effects: 22.3 mg/m <sup>3</sup> Workers - Inhalation; Long term local effects: 22.3 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 599.6 mg/kg/day Consumer - Inhalation; Short term local effects: 22.3 mg/m <sup>3</sup> Consumer - Inhalation; Long term local effects: 22.3 mg/m <sup>3</sup> Consumer - Inhalation; Long term systemic effects: 6.5 mg/m <sup>3</sup> Consumer - Dermal; Long term systemic effects: 303.5 mg/kg/day Consumer - Oral; Short term systemic effects: 1.51 mg/kg/day

PNEC	<ul> <li>Fresh water; 1.35 mg/l</li> <li>marine water; 1.35 mg/l</li> <li>Intermittent release; 9.1 mg/l</li> <li>STP; 1.75 mg/l</li> <li>Sediment (Freshwater); 1.8 mg/kg</li> <li>Sediment (Marinewater); 1.8 mg/kg</li> <li>Soil; 5.4 mg/kg</li> </ul> Boric Acid (CAS: 10043-35-3)
DNEL	General population - Oral; Long term systemic effects: 0.98 mg/kg/day
DNLL	General population - Dermal; Long term systemic effects: 196 mg/kg/day
	Workers - Dermal; Long term systemic effects: 392 mg/kg/day
	General population - Inhalation; Long term systemic effects: 4.15 mg/m <sup>3</sup> Workers - Inhalation; Long term systemic effects: 8.3 mg/m <sup>3</sup>
	workers - initialation, Long term systemic enects. 6.5 mg/m
PNEC	- Soil; 5.4 mg/kg
	- STP; 10 mg/l
	- Fresh water; 2.02 mg/l
	- marine water; 2.02 mg/l
	pentasodium (carboxylatomethyl)iminobis(ethylenenitrilo)tetraacetate (CAS: 140-01-2)
DNEL	Workers - Inhalation; Long term systemic effects: 1.5 mg/m <sup>3</sup>
PNEC	- Fresh water; 6.4 mg/l
	- marine water; 0.64 mg/l
	- Water, Intermittent release; 3.1 mg/l
	- STP; 51 mg/l
	- Sediment (Freshwater); 25.1 mg/kg
	- Sediment (Marinewater); 2.51 mg/kg - Soil; 1.26 mg/kg
	- 30ii, 1.20 Hig/Kg

### 8.2. Exposure controls



Colour



Colourless.

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.	
SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and chemical properties		
Appearance	Clear liquid.	

Odour	No characteristic odour.
рН	pH (concentrated solution): 8.7
Initial boiling point and range	>100°C @ 760 mm Hg
Relative density	1.30 @ 20°C
Solubility(ies)	100% Soluble in water.
9.2. Other information	
Other information	Not available.
SECTION 10: Stability and rea	ctivity
10.1. Reactivity	
Reactivity	See the other subsections of this section for further details.
10.2. Chemical stability	
Stability	Stable under the prescribed storage conditions. No particular stability concerns.
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	Avoid excessive heat for prolonged periods of time. Avoid contact with acids.
10.5. Incompatible materials	
Materials to avoid	Strong acids. Avoid contact with other photographic solutions and/or cleaning compounds.
10.6. Hazardous decompositio	n products
Hazardous decomposition	Thermal decomposition or combustion products may include the following substances: Oxides
products	of: Carbon. Sulphur. Nitrogen. Potassium. Sodium.
products SECTION 11: Toxicological int	· ·
•	formation
SECTION 11: Toxicological int	formation
SECTION 11: Toxicological inf 11.1. Information on toxicologi	formation cal effects This chemical formulation has not been tested for health effects. Exposure effects listed are
SECTION 11: Toxicological inf 11.1. Information on toxicologi Toxicological effects Acute toxicity - oral	iormation cal 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.
SECTION 11: Toxicological inf 11.1. Information on toxicologi Toxicological effects Acute toxicity - oral ATE oral (mg/kg) Germ cell mutagenicity	formation         cal 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.         7,804.72
SECTION 11: Toxicological int 11.1. Information on toxicologi Toxicological effects Acute toxicity - oral ATE oral (mg/kg) Germ cell mutagenicity Genotoxicity - in vitro Carcinogenicity	iormation         cal 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.         7,804.72         The product contains a substance that is classified as: Suspected of causing genetic defects.
SECTION 11: Toxicological inf 11.1. Information on toxicologi Toxicological effects Acute toxicity - oral ATE oral (mg/kg) Germ cell mutagenicity Genotoxicity - in vitro Carcinogenicity Carcinogenicity Reproductive toxicity	formation         cal 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.         7,804.72         The product contains a substance that is classified as: Suspected of causing genetic defects.         The product contains a substance that is classified as: Suspected of causing cancer.         The product contains a substance that is classified as: Suspected of causing cancer.

STOT - repeated exposure	The product contains a substance that is classified as: May cause damage to organs through prolonged or repeated exposure if inhaled.	
Inhalation	May cause respiratory system irritation.	
Ingestion	May cause discomfort if swallowed.	
Skin contact	Irritating to skin. May cause sensitisation by skin contact. May cause allergic contact eczema.	
Eye contact	Irritation of eyes and mucous membranes. Repeated exposure may cause chronic eye irritation.	
Acute and chronic health hazards	Prolonged or repeated exposure may cause severe irritation. May cause skin irritation/eczema. May cause sensitisation by skin contact. Irritating to eyes. Vapour or spray in the eyes may cause irritation and smarting. May cause allergy. May cause hypersensitivity.	
Route of exposure	Skin and/or eye contact Ingestion.	
Medical considerations	May aggravate existing: Skin disorders and allergies. Pre-existing eye problems.	
Toxicological information on ingredients.		

#### 2,2'-OXYBISETHANOL

Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	1,000.0
Species	Human
ATE oral (mg/kg)	1,000.0
	HYDROQUINONE
Acute toxicity - oral	
Acute toxicity oral (LD₅₀ mg/kg)	375.0
Species	Rat
ATE oral (mg/kg)	375.0
Carcinogenicity	
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans
penta	asodium (carboxylatomethyl)iminobis(ethylenenitrilo)tetraacetate
Acute toxicity - inhalation	
ATE inhalation (gases ppm)	4,500.0
ATE inhalation (vapours mg/l)	11.0
ATE inhalation (dusts/mists mg/l)	1.5
	1-Phenyl-4-methyl-4-hydroxymethyl-3-pyrazolidone
Acute toxicity - oral	

	Acute toxicity oral (LD₅₀ mg/kg)	566.0
	Species	Rat
	ATE oral (mg/kg)	566.0
SECTION	12: Ecological information	
12.1. Toxic	ity	
Toxicity	The pro	oduct contains a substance which is very toxic to aquatic organisms.
Ecological	information on ingredients.	
		2,2'-OXYBISETHANOL
	Acute aquatic toxicity	
	Acute toxicity - fish	LC₅₀, 96 hours: >100 mg/l, Fish
	Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 0.3 - 1 mg/l, Daphnia magna
		HYDROQUINONE
	Acute aquatic toxicity	
	LE(C)₅₀	$0.01 < L(E)C50 \le 0.1$
	M factor (Acute)	10
	Acute toxicity - fish	LC₅₀, 96 hours: 0.10-0.18 (Fathead Minnow) mg/l, Fish
	Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 0.05 mg/l, Daphnia magna
	Acute toxicity - aquatic plants	IC₅₀, 72 hours: 1.0 mg/l, Algae
		Boric Acid
	Acute aquatic toxicity	
	Acute toxicity - fish	LC₅₀, 96 hours: 600 mg/l, Fish
	Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 115-153 mg/l, Daphnia magna
	pent	asodium (carboxylatomethyl)iminobis(ethylenenitrilo)tetraacetate
	Acute aquatic toxicity	
	Acute toxicity - fish	LC₅₀, 96 hours: >1000 (lepomis macrochirus) mg/l, Fish
	Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: >500 (daphnia magna) mg/l, Daphnia magna
		1-Phenyl-4-methyl-4-hydroxymethyl-3-pyrazolidone
	Acute aquatic toxicity	
	Acute toxicity - fish	LC₅₀, 96 hours: 32 (Rainbow Trout) mg/l, Fish
	Acute toxicity - aquatic invertebrates	EC₅₀, 48 hours: 1.7 mg/l, Daphnia magna

#### 12.2. Persistence and degradability

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

#### 12.3. Bioaccumulative potential

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 vPvB assessment

**Results of PBT and vPvB** This product does not contain any substances classified as PBT or vPvB. assessment

#### Ecological information on ingredients.

#### HYDROQUINONE

**Results of PBT and vPvB** This substance is not classified as PBT or vPvB according to current EU criteria. **assessment** 

#### 12.6. Other adverse effects

Other adverse effects None known.

#### SECTION 13: Disposal considerations

#### 13.1. 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 handled by a licensed hazardous waste contractor.

### Waste class 090101

#### **SECTION 14: Transport information**

-		
General	Exceptions relating to marine pollutants in small packages apply to this product, so that it is not required to be labelled or transported in accordance with dangerous goods regulations. See ADR SP 375, IATA SP A197, and IMDG 2.10.2.7.	
14.1. UN number		
UN No. (ADR/RID)	3082	
UN No. (IMDG)	3082	
UN No. (ICAO)	3082	
14.2. UN proper shipping name	8	
Proper shipping name (ADR/RID)	UN3082, Environmentally hazardous substance, liquid, n.o.s. (contains hydroquinone).	
Proper shipping name (IMDG)	UN3082, Environmentally hazardous substance, liquid, n.o.s. (contains hydroquinone).	
Proper shipping name (ICAO)	UN3082, Environmentally hazardous substance, liquid, n.o.s. (contains hydroquinone).	
Proper shipping name (ADN)	UN3082, Environmentally hazardous substance, liquid, n.o.s. (contains hydroquinone).	
14.3. Transport hazard class(es)		
ADR/RID class	9 (M6)	

ADR/RID label	9
IMDG class	9
ICAO class/division	9

**Transport labels** 

14.4. Packing group	
ADR/RID packing group	III
IMDG packing group	Ш
ICAO packing group	Ш

#### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

#### 14.6. Special precautions for user

EmS F-A, S-F

Tunnel restriction code (E)

#### 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. 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)

#### 15.2. Chemical safety assessment

See the appended document: Safe Use of Mixtures Information (SUMI)

### 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	Mr James Cooper, HARMAN Technology Ltd, Mobberley, Knutsford, Cheshire, WA16 7GB, ENGLAND, United Kingdom, Tel.: +44(0)1565 650000 email: james.cooper@harmantechnology.com
Revision date	16/09/2022
Revision	4
Supersedes date	12/01/2021
Hazard statements in full	<ul> <li>H302 Harmful if swallowed.</li> <li>H317 May cause an allergic skin reaction.</li> <li>H318 Causes serious eye damage.</li> <li>H319 Causes serious eye irritation.</li> <li>H332 Harmful if inhaled.</li> <li>H341 Suspected of causing genetic defects.</li> <li>H351 Suspected of causing cancer.</li> <li>H360FD May damage fertility. May damage the unborn child.</li> <li>H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.</li> <li>H373 May cause damage to organs through prolonged or repeated exposure.</li> <li>H400 Very toxic to aquatic life.</li> <li>H411 Toxic to aquatic life with long lasting effects.</li> </ul>

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### Safe Use of Mixtures Information (SUMI)

# Photoprocessing Solutions from Liquid or Powder Concentrates: Manual Processing (Professional Use)

#### Disclaimer

This SUMI is a generic document for communicating conditions of safe use of a product in response to the REACH obligation. This document relates only to conditions of safe use and is not specific to a product. By adding this SUMI to a specific product Safety Data Sheet (SDS), the importer/formulator declares that the mixture can safely be used following the instructions below. Following occupational health legislation, the employer of workers remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product. Derived No Effect Levels (DNEL) and Predicted No Effect Concentration (PNEC) values of substances derived from the Chemical Safety Assessment (CSA) will be given in section 8 of the SDS. The REACH registration numbers, where applicable, complete an extended product SDS.

Operational conditions		
Maximum duration	1 hour per day for diluting liquid concentrates or dissolving powders (when applicable).	
	1 hour per day for mixing and disposal activit	ies.
	6 hours per day for application (= processing)	l.
Frequency of exposure	Dissolving powders: 25 days per year.	
	Diluting liquids and all other activities: 50 day	vs per year.
Physical state	As supplied: liquid concentrates or powder co	oncentrates.
	As used, after making up: aqueous working so	olution.
Process conditions	Covers use at ambient temperatures.	
	Provide a good standard of controlled ventila	tion (10 to 15 air changes per hour).
	Keep emissions below the occupational expo	sure limits of the ingredients
	specified in section 8 of the SDS.	-
	Avoid direct contact.	
	Regular cleaning of equipment and work area	Э.
Risk management measures		
Conditions and measures	Wear safety glasses with side shields.	
related to	Wear appropriate chemical resistant gloves: see section 8 of the SDS.	
Personal Protection Equipment	Wear lab coat or overall.	
(PPE), hygiene and health	No respiratory protective equipment is required under normal conditions of use, provided	
evaluation	that adequate ventilation is in place.	
	Eye wash station and emergency showers are	e recommended.
	Avoid breathing dust (when handling powder	rs), mist/vapours.
	Avoid contact with skin, eyes and clothing.	
	Training of worker in relation to proper use a	nd maintenance of the PPE must be ensured.
Good practice advice		
Use personal protective equipme	ent as required.	
Wash hands before breaks and a	fter work.	
Keep good hygiene and safety pr	Keep good hygiene and safety practice.	
Use only with adequate ventilation	on.	
Do not eat, drink or smoke when using this product.		

Environmental measures

Do not allow this material to drain into sewers/water supplies.

Ensure collection and disposal with appropriately licenced waste contractor.

Dispose of waste material according to Local, State, Federal and Provincial Environmental Regulations.

Use descriptors

PW-Widespread use by professional workers.

SU7-Printing and reproduction of recorded media.

PC30-Photochemicals.

PROC5-Mixing or blending in batch processes.

PROC8a-Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.

PROC8b-Transfer of substance or mixture (charging and discharging) at dedicated facilities.

PROC13-Treatment of articles by dipping and pouring.

ERC8a-Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor).

ERC8b-Widespread use of reactive processing aid (no inclusion into or onto article, indoor).

Additional information on product composition

In section 2 of the SDS as well as on the label, the classification of the mixture as supplied is provided.

See section 3 of the SDS for information on the product's composition. Note that this information will be for the concentrate supplied, which is used to create the working strength (WS) solution.

Relevant limit values of ingredients on which the exposure assessment is based, are listed in section 8 of the SDS.

The product may contain sensitizing ingredients that may cause allergic reaction to certain people.

Section 2 of the SDS states these ingredients where applicable.

# **ILFORD** PHOTO HARMAN technology Ltd

### Safe Use of Mixtures Information (SUMI)

# Photoprocessing Solutions from Liquid or Powder Concentrates: Manual Processing (Consumer Use)

#### Disclaimer

This SUMI is a generic document for communicating conditions of safe use of a product in response to the REACH obligation. This document relates only to conditions of safe use and is not specific to a product. By adding this SUMI to a specific product Safety Data Sheet (SDS), the importer/formulator declares that the mixture can safely be used following the instructions below. Following occupational health legislation, the employer of workers remains responsible for communicating relevant use information to employees. When developing workplace instructions for employees, SUMI Sheets should always be considered in combination with the SDS and the label of the product. Derived No Effect Levels (DNEL) and Predicted No Effect Concentration (PNEC) values of substances derived from the Chemical Safety Assessment (CSA) will be given in section 8 of the SDS. The REACH registration numbers, where applicable, complete an extended product SDS.

Operational conditions		
Maximum duration	15 minutes per day for dissolving powders (when applicable).	
	15 minutes per day for mixing and disposal activities.	
	4 hours per day for application (= processing).	
Frequency of exposure	Dissolving powders: 12 days per year.	
	Diluting liquids and all other activities: 25 days per year.	
Physical stateAs supplied: liquid concentrate or powder concentrate.		
	As used, after making up: aqueous working strength solution.	
Process conditions	Covers use at ambient temperatures.	
	Provide a good standard of ventilation.	
	Avoid direct contact.	
	Regular cleaning of equipment and work area.	
Risk management measures		
Conditions and measures	Wear safety glasses with side shields.	
related to	Wear appropriate chemical resistant gloves: see section 8 of the SDS.	
Personal Protection Equipment	Wear lab coat or overall.	
(PPE), hygiene and health	Provide adequate ventilation.	
evaluation	Avoid breathing dust (when handling powders), mist/vapours.	
	Avoid contact with skin, eyes and clothing.	
Good practice advice		
Use Personal Protective Equipme		
Wash hands before breaks and after work.		
Use only with adequate ventilation.		
Do not eat, drink or smoke when using this product.		
Environmental measures		
Do not allow this material to drain into sewers/water supplies.		
Dispose of waste material according to Local, State, Federal and Provincial Environmental Regulations.		

#### Use descriptors

C-Consumer use.

SU7-Printing and reproduction of recorded media.

PC30-Photochemicals.

PROC5-Mixing or blending in batch processes.

PROC8a-Transfer of substance or mixture (charging and discharging) at non-dedicated facilities.

PROC13-Treatment of articles by dipping and pouring.

ERC8a-Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor).

ERC8b-Widespread use of reactive processing aid (no inclusion into or onto article, indoor).

Additional information on product composition

In section 2 of the SDS as well as on the label, the classification of the mixture as supplied is provided.

See section 3 of the SDS for information on the product's composition.

Note that this information will be for the concentrate supplied, which is used to create the working strength (WS) solution.

The product may contain sensitizing ingredients that may cause allergic reaction to certain people. Section 2 of the SDS states these ingredients where applicable.