**ILFORD** PHOTO

# HARMAN technology Ltd

## SAFETY DATA SHEET

### 2000RT Machine Paper Developer

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

SECTION 1: Identification of	the substance/mixture and of the company/undertaking
1.1. Product identifier	
Product name	2000RT Machine Paper Developer
Product number	1758056
Internal identification	10004
Container size	5 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 Advisor Dr Trevor Rhodes Tel: +44(0)1565 650000, email: trevor.rhodes@harmantechnology.com Australia: Contact Distributor (http://www.crkennedy.com.au) Tel +61 (0)3 9823 1555
1.4. Emergency telephone n	umber
1.4. Emergency telephone n Emergency telephone	umber Australia: 1-800-557346 UK and elsewhere: +44(0) 207 858 1228
	Australia: 1-800-557346 UK and elsewhere: +44(0) 207 858 1228
Emergency telephone	Australia: 1-800-557346 UK and elsewhere: +44(0) 207 858 1228 cation
Emergency telephone SECTION 2: Hazards identifi 2.1. Classification of the sub- Classification (EC 1272/2008	Australia: 1-800-557346 UK and elsewhere: +44(0) 207 858 1228 cation stance or mixture 3)
Emergency telephone SECTION 2: Hazards identifi 2.1. Classification of the sub- Classification (EC 1272/2008 Physical hazards	Australia: 1-800-557346 UK and elsewhere: +44(0) 207 858 1228 cation stance or mixture
Emergency telephone SECTION 2: Hazards identifi 2.1. Classification of the sub- Classification (EC 1272/2008	Australia: 1-800-557346 UK and elsewhere: +44(0) 207 858 1228 cation stance or mixture 3)
Emergency telephone SECTION 2: Hazards identifi 2.1. Classification of the sub- Classification (EC 1272/2008 Physical hazards	Australia: 1-800-557346 UK and elsewhere: +44(0) 207 858 1228 cation stance or mixture Not Classified Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 2 - H351 Repr. 2 - H361fd STOT
Emergency telephone SECTION 2: Hazards identifi 2.1. Classification of the sub- Classification (EC 1272/2008 Physical hazards Health hazards	Australia: 1-800-557346 UK and elsewhere: +44(0) 207 858 1228 cation stance or mixture ) Not Classified Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 2 - H351 Repr. 2 - H361fd STOT RE 2 - H373
Emergency telephone SECTION 2: Hazards identifi 2.1. Classification of the sub- Classification (EC 1272/2008 Physical hazards Health hazards Environmental hazards	Australia: 1-800-557346 UK and elsewhere: +44(0) 207 858 1228 cation stance or mixture ) Not Classified Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 2 - H351 Repr. 2 - H361fd STOT RE 2 - H373
Emergency telephone SECTION 2: Hazards identifi 2.1. Classification of the sub- Classification (EC 1272/2008 Physical hazards Health hazards Environmental hazards 2.2. Label elements	Australia: 1-800-557346 UK and elsewhere: +44(0) 207 858 1228 cation stance or mixture ) Not Classified Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Muta. 2 - H341 Carc. 2 - H351 Repr. 2 - H361fd STOT RE 2 - H373

Hazard statements	<ul> <li>H317 May cause an allergic skin reaction.</li> <li>H319 Causes serious eye irritation.</li> <li>H341 Suspected of causing genetic defects.</li> <li>H351 Suspected of causing cancer.</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> </ul>
Precautionary statements	<ul> <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, pentasodium (carboxylatomethyl)iminobis(ethylenenitrilo)tetraacetate, 1- Phenyl-4-methyl-4-hydroxymethyl-3-pyrazolidone

#### 2.3. Other hazards

No information available.

#### SECTION 3: Composition/information on ingredients

3.2. Mixtures		
Sodium Sulphite		10-30%
CAS number: 7757-83-7	EC number: 231-821-4	REACH registration number: 01- 2119537420-49-XXXX
Classification	Classificatio	on (67/548/EEC or 1999/45/EC)
Not Classified	R31.	
Potassium Carbonate		5-10%
CAS number: 584-08-7	EC number: 209-529-3	REACH registration number: 01- 2119532646-36-0000
Classification	Classificatio	on (67/548/EEC or 1999/45/EC)
Skin Irrit. 2 - H315	Xi;R36/37/3	38.
Eye Irrit. 2 - H319		
STOT SE 3 - H335		

HYDROQUINONE			< 3%
CAS number: 123-31-9	EC number: 204-617	8 REACH registration r 2119524016-51-XXX	
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		Classification (67/548/EEC or 1999/45/EC Carc. Cat. 3;R40 Muta. Cat. 3;R68 Xn;R22 √;R50	
pentasodium			1-5%
(carboxylatomethyl)iminobis	e(ethylenenitrilo)tetraacetate		
CAS number: 140-01-2	EC number: 205-391	3 REACH registration r 2119474445-33-XXX	
Classification		Classification (67/548/EEC or 1999/45/EC	)
Acute Tox. 4 - H332		Kn;R20. Repr. Cat. 3;R63.	/
Repr. 2 - H361fd			
STOT RE 2 - H373			
SODIUM HYDROXIDE			<1%
CAS number: 1310-73-2	EC number: 215-185	5 REACH registration r 2119457892-27-XXX	
Classification		Classification (67/548/EEC or 1999/45/EC	)
Skin Corr. 1A - H314		C;R35	,
Eye Dam. 1 - H318			
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		<b>Classification (67/548/EEC or 1999/45/EC</b> Kn;R22. N;R51/53. R43.	)
The Full Text for all R-Phrase	es and Hazard Statements are Disp	layed in Section 16.	
SECTION 4: First aid measu			
4.1. Description of first aid m	easures		
Inhalation		r at once. Get medical attention if any disc	comfort continues.
Ingestion	Rinse mouth thoroughly with wa	ter. Get medical attention if any discomfor	t continues.
Skin contact	-	ource of contamination. Remove contamin ater. Get medical attention if irritation pers	-

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 symptoms	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 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 non-combustible. Use extinguishing media appropriate for surrounding fire.
5.2. Special hazards arising from	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 release	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	S
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	
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	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 storage	ge, 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 Control	ols/personal protection
8.1. Control parameters Occupational exposure limits HYDROQUINONE	
Long-term exposure limit (8-h	our TWA): WEL 0.5 mg/m³
SODIUM HYDROXIDE Short-term exposure limit (15-	minute): WEL 2 ma/m <sup>3</sup>
WEL = Workplace Exposure L	
	Sodium Sulphite (CAS) 7757 92 7)
	Sodium Sulphite (CAS: 7757-83-7)
PNEC	- Fresh water; 1.33 mg/l
	- Marine water; 0.13 mg/l
	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
per	tasodium (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

#### SODIUM HYDROXIDE (CAS: 1310-73-2)

DNEL

Workers - Inhalation; Long term local effects: 1.0 mg/m<sup>3</sup> Consumer - Inhalation; Long term local effects: 1.0 mg/m<sup>3</sup>

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

#### **SECTION 9: Physical and Chemical Properties**

9.1. Information on basic phys	nation on basic physical and chemical properties	
Appearance	Clear liquid.	
Colour	Colourless to pale yellow.	
Odour	No characteristic odour.	
рН	pH (concentrated solution): 10.5 pH (diluted solution): 10.4 (1+4)	
Initial boiling point and range	>100°C @ 760 mm Hg	
Relative density	1.22 @ 20°C	
Solubility(ies)	Soluble in water.	
9.2. Other information		
Other information	Not available.	
SECTION 10: Stability and rea	reactivity	
10.1. Reactivity		
Reactivity	See the other subsections of this section for further details.	
40.0 Obernie al stability		

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	on products
Hazardous decomposition products	Thermal decomposition or combustion products may include the following substances: Oxides of: Carbon. Sulphur. Nitrogen. Potassium. Sodium.
SECTION 11: Toxicological inf	formation
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)	13,082.16
Acute toxicity - inhalation	
ATE inhalation (gases ppm)	314,333.61
ATE inhalation (vapours mg/l)	768.37
ATE inhalation (dusts/mists mg/l)	104.78
Germ cell mutagenicity Genotoxicity - in vitro	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 Reproductive toxicity - development	The product contains a substance that is classified as: Suspected of damaging fertility or the unborn child.
Specific target organ toxicity -	repeated exposure
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 entry	Ingestio	on. Skin and/or eye contact
Medical considerations	May ag	gravate existing: Skin disorders and allergies. Pre-existing eye problems.
		HYDROQUINONE
Acute toxicity -	oral	
Acute toxicity o mg/kg)	ral (LD₅₀	375.0
Species		Rat
ATE oral (mg/k	g)	375.0
Carcinogenicity		
IARC carcinoge	enicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.
	penta	asodium (carboxylatomethyl)iminobis(ethylenenitrilo)tetraacetate
Acute toxicity -	inhalation	
ATE inhalation ppm)	(gases	4,500.0
ATE inhalation mg/l)	(vapours	11.0
ATE inhalation (dusts/mists mg	J/I)	1.5
		1-Phenyl-4-methyl-4-hydroxymethyl-3-pyrazolidone
Acute toxicity -	oral	
Acute toxicity o mg/kg)	ral (LD₅₀	566.0
Species		Rat
ATE oral (mg/k	g)	566.0
SECTION 12: Ecological Info	ormation	
12.1. Toxicity		

#### 12.1. Toxicity

Toxicity

The product contains a substance which is very toxic to aquatic organisms.

#### 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

#### pentasodium (carboxylatomethyl)iminobis(ethylenenitrilo)tetraacetate

٨٥	uto tovicity fich	LC OG haurai >1000 (lanamia magraphirua) mg/l Algan
	ute toxicity - fish	LC₅₀, 96 hours: >1000 (lepomis macrochirus) mg/l, Algae
	ute toxicity - aquatic vertebrates	EC₅₀, 48 hours: >500 (daphnia magna) mg/l, Daphnia magna
		1-Phenyl-4-methyl-4-hydroxymethyl-3-pyrazolidone
Ac	cute toxicity - fish	LC₅₀, 96 hours: 32 (Rainbow Trout) mg/l, Algae
	cute toxicity - aquatic vertebrates	EC₅₀, 48 hours: 1.7 mg/l, Daphnia magna
12.2. Persistenc	ce and degradability	
Persistence and	<b>degradability</b> Ther	e are no data on the degradability of this product.
12.3. Bioaccum	ulative potential	
Bioaccumulative	<b>e potential</b> No d	ata available on bioaccumulation.
12.4. Mobility in	soil	
Mobility	The	product is soluble in water.
12.5. Results of	PBT and vPvB asse	ssment
Results of PBT assessment	and vPvB This	product does not contain any substances classified as PBT or vPvB.
		HYDROQUINONE
	esults of PBT and vPv sessment	
	sessment	
as	sessment erse effects	
ass <u>12.6. Other adve</u> Other adverse e	sessment erse effects	B This substance is not classified as PBT or vPvB according to current EU criteria.
ass <u>12.6. Other adve</u> Other adverse e SECTION 13: D	sessment erse effects effects None	B This substance is not classified as PBT or vPvB according to current EU criteria.
ass <u>12.6. Other adve</u> Other adverse e SECTION 13: D	sessment erse effects effects None Disposal consideration atment methods ds Useo perm have wast	B This substance is not classified as PBT or vPvB according to current EU criteria.
ass 12.6. Other adverse e Other adverse e SECTION 13: D 13.1. Waste tree	sessment erse effects effects None Disposal consideration atment methods ds Useo perm have wast	B This substance is not classified as PBT or vPvB according to current EU criteria. known. s , diluted, and spent solutions may be allowed to be discharged to sanitary sewer by it IF allowed by local regulations. Consult your local authority for advice. Waste may to be pre-treated before discharge. Consult local authorities before discharging any e to sewer. Do not discharge to septic system. Waste that cannot be discharged to sewer have to handled by a licensed hazardous waste contractor.
ass 12.6. Other adverse e Other adverse e SECTION 13: D 13.1. Waste trea Disposal method	sessment erse effects effects None Disposal consideration atment methods ds Used perm have wast may	B This substance is not classified as PBT or vPvB according to current EU criteria. known. s , diluted, and spent solutions may be allowed to be discharged to sanitary sewer by it IF allowed by local regulations. Consult your local authority for advice. Waste may to be pre-treated before discharge. Consult local authorities before discharging any e to sewer. Do not discharge to septic system. Waste that cannot be discharged to sewer have to handled by a licensed hazardous waste contractor.
ass 12.6. Other adverse e Other adverse e SECTION 13: D 13.1. Waste trea Disposal method	sessment erse effects offects None Disposal consideration atment methods ds Used perm have wast may 0901 ransport information	B This substance is not classified as PBT or vPvB according to current EU criteria. known.  s  , diluted, and spent solutions may be allowed to be discharged to sanitary sewer by it IF allowed by local regulations. Consult your local authority for advice. Waste may to be pre-treated before discharge. Consult local authorities before discharging any e to sewer. Do not discharge to septic system. Waste that cannot be discharged to sewer have to handled by a licensed hazardous waste contractor.
ass <u>12.6. Other adver</u> Other adverse e <u>SECTION 13: D</u> <u>13.1. Waste trea</u> Disposal method Waste class <u>SECTION 14: T</u>	sessment erse effects bisposal consideration atment methods ds Used perm have wast may 0901 ransport information	B This substance is not classified as PBT or vPvB according to current EU criteria. known.  known.  known.  known set the solutions may be allowed to be discharged to sanitary sewer by it IF allowed by local regulations. Consult your local authority for advice. Waste may to be pre-treated before discharge. Consult local authorities before discharging any e to sewer. Do not discharge to septic system. Waste that cannot be discharged to sewer have to handled by a licensed hazardous waste contractor.  ptions relating to marine pollutants in small packages apply to this product, so that it is equired to be labelled or transported in accordance with dangerous goods regulations.
ass 12.6. Other adverse effects SECTION 13: D 13.1. Waste treat Disposal method Waste class SECTION 14: T General	sessment erse effects None Disposal consideration atment methods ds Used perm have wast may 0901 Transport information Exce not m See	B This substance is not classified as PBT or vPvB according to current EU criteria. known.  s  diluted, and spent solutions may be allowed to be discharged to sanitary sewer by it IF allowed by local regulations. Consult your local authority for advice. Waste may to be pre-treated before discharge. Consult local authorities before discharging any a to sewer. Do not discharge to septic system. Waste that cannot be discharged to sewer have to handled by a licensed hazardous waste contractor.  D1  ptions relating to marine pollutants in small packages apply to this product, so that it is equired to be labelled or transported in accordance with dangerous goods regulations. ADR SP 375, IATA SP A197, and IMDG 2.10.2.7.

UN No. (ICAO)	3082	
14.2. UN proper shipping nam	<u>e</u>	
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(e	vs <u>)</u>	
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	III	
ICAO packing group	III	
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	<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</li> <li>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>
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	Material Safety Data Sheet, Misc. manufacturers. European Photographic Chemical Industry Code of Practice For Classification And Labelling 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	12/09/2017
Revision	2
Supersedes date	14/05/2015
Hazard statements in full	<ul> <li>H302 Harmful if swallowed.</li> <li>H314 Causes severe skin burns and eye damage.</li> <li>H315 Causes skin irritation.</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>H335 May cause respiratory irritation.</li> <li>H341 Suspected of causing genetic defects.</li> <li>H351 Suspected of causing cancer.</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)

### **Automated Photoprocessing using Aqueous based Products**

#### 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 delivery, storage, loading, cleaning and mixing operations.
	4-8 hours per day for application.
Frequency of exposure	240 days per year.
Physical state	Aqueous solutions (aq).
Process conditions	Covers use at ambient temperatures.
	Provide a good standard of controlled ventilation (10 to 15 air changes per hour).
	Keep emissions below the occupational exposure limits of the ingredients
	specified in section 8 of the SDS.
	Avoid direct contact.
	Regular cleaning of equipment and work area.
	Supervision in place to check that Risk Management Measures (RMM's) are in place and
	are being correctly used and Operational Conditions (OC's) followed.
Risk management measures	
Conditions and measures	Delivery & storage: Wear suitable gloves and labcoat.
related to	Application: Wear labcoat and if there is a chance of exposure wear suitable eye
Personal Protection Equipment	protection and suitable gloves.
(PPE), hygiene and health evaluation	Loading/Cleaning/ Mixing: Wear suitable eye protection with side shield, suitable gloves
	and labcoat.
	Wear appropriate chemical resistant gloves: see Section 8 of the SDS.
	No respiratory protective equipment should be required under normal conditions of use
	provided that adequate ventilation is in place.
	Eye wash station and emergency showers are recommended.
	Avoid breathing mist/vapours.
	Avoid contact with skin, eyes and clothing.
	Training of workers in relation to proper use and maintenance of all Personal Protective
	Equipment must be ensured.
Good practice advice	
Use personal protective equipme	nt as required.
Wash hands before breaks and after work.	
Keep good industrial hygiene and safety practice.	
Use only with adequate ventilation	

Do not eat, drink or smoke when using this product.

Wash contaminated clothing before reuse.

Store at room temperature.

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.

Ensure collection and disposal with appropriately licenced waste contractor.

Do not dispose of together with general office waste.

Use descriptors

IS- Use at industrial sites.

PW-Widespread use by professional workers.

SU7-Printing and reproduction of recorded media.

PC30-Photochemicals.

PROC1-Chemical production or refinery in closed process without likelihood of exposure or processes with

equivalent containment conditions.

PROC2-Chemical production or refinery in closed continuous process with occasional

controlled exposure or processes with equivalent containment conditions.

PROC3- Manufacture or formulation in the chemical industry in closed batch processes with occasional

controlled exposure or processes with equivalent containment condition.

PROC5- Mixing and 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.

ERC6b-Use of reactive processing aid at industrial site (no inclusion into or onto article).

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 is provided.

All ingredients contributing to the classification are stated in Section 3 of the SDS.

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.

Note that this will be usually the concentrate needed to create the working strength (WS) solution. In some cases the product will be RTU (Ready to Use) and will not require diluting. Hence there is a need to estimate the WS composition on a cases by case basis.

Mixing aqueous solutions creates a slightly different risk management method than mixing powders as the latter is normally done by operators wearing respirators suitable for the particle size and hazard posed by the substance(s).