Revision Date 22/11/2013
Revision 12
Supersedes date 16/09/2010

SAFETY DATA SHEET
Ilfotec RT Rapid Developer (Part A)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name Ilfotec RT Rapid Developer (Part A)
Product No. 1878176
Internal Id 10029
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 number

Swiss Toxicological Information Centre (24 hours) Tel: +41 (0)1 251 5151, Fax: +41 (0)1 252 8833 E-mail: stic@access.ch, Internet: www.toxi.ch

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Carc. Cat. 3;R40, Muta Cat. 3;R68. Xi;R36. R43.

2.2. Label elements

Contains HYDROQUINONE
Potassium Carbonate

Labelling

Harmful

Risk Phrases

R36	Irritating to eyes.
R40	Limited evidence of a carcinogenic effect.
R43	May cause sensitisation by skin contact.
R68	Possible risk of irreversible effects.

Safety Phrases

S2	Keep out of the reach of children.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37	Wear suitable protective clothing and gloves.
S46	If swallowed, seek medical advice immediately and show this container or label.
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.
S64	If swallowed, rinse mouth with water (only if the person is conscious).

2.3. Other hazards

No information available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

1-Phenyl-4-Methyl-4-Hydroxymethyl-3-Pyrazolidone **< 1**

CAS-No.: 13047-13-7 **EC No.: 235-920-3**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 4 - H302	Xn;R22.
Skin Sens. 1 - H317	N;R51/53.
Aquatic Chronic 2 - H411	R43.

HYDROQUINONE **1-5%**

CAS-No.: 123-31-9 **EC No.: 204-617-8**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Acute Tox. 4 - H302	Carc. Cat. 3;R40
Eye Dam. 1 - H318	Muta. Cat. 3;R68
Skin Sens. 1 - H317	Xn;R22
Muta. 2 - H341	R43
Carc. 2 - H351	Xi;R41
Aquatic Acute 1 - H400	N;R50

Potassium Carbonate **5-10%**

CAS-No.: 584-08-7 **EC No.: 209-529-3**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Skin Irrit. 2 - H315	Xi;R36,R38.
Eye Irrit. 2 - H319	

SODIUM CARBONATE **5-10%**

CAS-No.: 497-19-8 **EC No.: 207-838-8**

Classification (EC 1272/2008)	Classification (67/548/EEC)
Eye Irrit. 2 - H319	Xi;R36

SODIUM HYDROXIDE		< 1
CAS-No.: 1310-73-2	EC No.: 215-185-5	
Classification (EC 1272/2008) Skin Corr. 1A - H314		Classification (67/548/EEC) C;R35

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition Comments

Corrosive according to Worksafe Australia

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion

Rinse mouth thoroughly. Get medical attention if any discomfort continues.

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Contact physician if irritation continues.

Eye contact

Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if irritation persists.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation

No specific symptoms noted.

Ingestion

No specific symptoms noted.

Skin contact

May cause sensitisation by skin contact.

Eye contact

Irritation of eyes and mucous membranes.

4.3. Indication of any immediate medical attention and special treatment needed

No specific first aid measures noted.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

Specific hazards

The product is non-combustible. If heated, harmful vapours may be formed.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Avoid breathing fire vapours.

Protective equipment for fire-fighters

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 MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes. Provide adequate ventilation.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground. The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

6.3. Methods and material for containment and cleaning up

For waste disposal, see section 13. Small quantities may be flushed to drains with plenty of water. Prevent discharge of larger quantity to drain. Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like. Wash contaminated area with water. Do not let washing down water contaminate ponds or waterways.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Provide good ventilation. Avoid spilling, skin and eye contact. Do not eat, drink or smoke when using the product. Read and follow manufacturer's recommendations.

7.2. Conditions for safe storage, including any incompatibilities

Store in closed original container in a dry place. Store under well-ventilated conditions at a temperature below 25°C.

Storage Class

Chemical storage.

7.3. 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

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
HYDROQUINONE	WEL		0.5 mg/m3			
SODIUM HYDROXIDE	WEL				2 mg/m3	

WEL = Workplace Exposure Limit.

8.2. Exposure controls

Protective equipment

Engineering measures

Provide adequate ventilation. Must not be handled in confined space without sufficient ventilation.

Respiratory equipment

Respiratory protection not required.

Hand protection

Use protective gloves.

Eye protection

Use eye protection.

Other Protection

Wear suitable protective clothing as protection against splashing or contamination.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Colourless to pale yellow.
Odour	No characteristic odour.
Solubility	Soluble in water.
Initial boiling point and boiling range (°C)	>100 760 mm Hg
Relative density	1.25 20
pH-Value, Conc. Solution	12.9

9.2. Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under the prescribed storage conditions. No particular stability concerns.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

Will not polymerise.

10.4. 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 decomposition products

Fire or high temperatures create: Sulphurous gases (SOx).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

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.

Other Health Effects

Hydroquinone: Carcinogen Category 3. Mutagen Category 3. ACGIH A3 IARC 3 IARC Animal Carcinogen List. IARC Int. Agency for Cancer Research.

Inhalation

May cause irritation to the respiratory system.

Ingestion

Harmful if swallowed. 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.

Health Warnings

Prolonged or repeated exposure may cause severe irritation. May cause skin irritation/eczema. May cause sensitisation by skin contact. Irritating to eyes. Spray and vapour in the eyes may cause irritation and smarting. May cause allergy. May cause hypersensitivity.

Route of entry

Skin and/or eye contact. Ingestion.

Medical Considerations

May aggravate existing: Skin disorders and allergies. Pre-existing eye problems.

Toxicological information on ingredients.

SODIUM CARBONATE (CAS: 497-19-8)

Toxic Dose 1 - LD 50

4090 mg/kg (oral rat)

HYDROQUINONE (CAS: 123-31-9)

Toxic Dose 1 - LD 50

320 mg/kg (oral rat)

Toxic Dose 2 - LD 50

>900 mg/kg (skn-rat)

1-Phenyl-4-Methyl-4-Hydroxymethyl-3-Pyrazolidone (CAS: 13047-13-7)

Toxic Dose 1 - LD 50

1000 mg/kg (oral rat)

Toxic Dose 2 - LD 50

>2000 mg/kg (skn-rat)

Diethylenetriamine Pentaacetic Acid Na5 (CAS: 140-01-2)

Toxic Dose 1 - LD 50

>4000 mg/kg (oral rat)

Potassium Carbonate (CAS: 584-08-7)

Toxic Dose 1 - LD 50

2570 mg/kg (oral-mouse)

Toxic Dose 2 - LD 50

1870 mg/kg (oral rat)

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

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

Ecological information on ingredients.

SODIUM CARBONATE (CAS: 497-19-8)

LC 50, 96 Hrs, Fish mg/l

320 (Bluegill)

HYDROQUINONE (CAS: 123-31-9)

LC 50, 96 Hrs, Fish mg/l

0.10-0.18 (Fathead Minnow)

EC 50, 48 Hrs, Daphnia, mg/l

0.05

IC 50, 72 Hrs, Algae, mg/l

1.0

1-Phenyl-4-Methyl-4-Hydroxymethyl-3-Pyrazolidone (CAS: 13047-13-7)

LC 50, 96 Hrs, Fish mg/l

32 (Rainbow Trout)

EC 50, 48 Hrs, Daphnia, mg/l

1.7

Diethylenetriamine Pentaacetic Acid Na5 (CAS: 140-01-2)

LC 50, 96 Hrs, Fish mg/l

>1000 (lepomis macrochirus)

EC 50, 48 Hrs, Daphnia, mg/l

>500 (daphnia magna)

12.2. Persistence and degradability

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

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

The disposal process for this product when it becomes waste, depends largely upon how much (volume) waste is generated, where the waste is generated (location) and by whom (whether in a professional or amateur or other capacity). Therefore only outline guidance can be provided. For detailed guidance and specialist advice on the disposal of this product when it becomes waste, please visit the COPPICE web site at http://www.pic.uk.net/coppice/index.htm. The information is relevant to both professional and amateur users.

13.1. Waste treatment 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.

SECTION 14: TRANSPORT INFORMATION

General The product is not covered by international regulation 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)

Not applicable.

Transport Labels

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply. 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)

Guidance Notes

CHIP for everyone HSG(108).

EU Legislation

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. EU COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010.

National Regulations

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. Workplace Exposure Limits 2007 (EH40) The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 No 716

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Ilfotec RT Rapid Developer (Part A)

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.

Information Sources

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.

Revision Date	22/11/2013
Revision	12
Supersedes date	16/09/2010

Risk Phrases In Full

R35	Causes severe burns.
R22	Harmful if swallowed.
R36	Irritating to eyes.
R38	Irritating to skin.
R40	Limited evidence of a carcinogenic effect.
R43	May cause sensitisation by skin contact.
R68	Possible risk of irreversible effects.
R41	Risk of serious damage to eyes.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R50	Very toxic to aquatic organisms.

Hazard Statements In Full

H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H341	Suspected of causing genetic defects.
H411	Toxic to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.