

SAFETY DATA SHEET

ILFOTEC HC DEVELOPER 1+31

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

1.1. Product identifier

Product name ILFOTEC HC DEVELOPER 1+31
Internal Id 10154

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

Contact Person 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.
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1.4. Emergency telephone number

See msds of appropriate concentrate for details.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Eye Irrit. 2 - H319
Environment	Not classified.

Classification (1999/45/EEC) Not classified.

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

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008



Signal Word	Warning
Hazard Statements	
	H319 Causes serious eye irritation.
Precautionary Statements	
	P280 Wear protective gloves/protective clothing/eye protection/face protection.
	P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P337 If eye irritation persists:
	P313 Get medical advice/attention.
Supplemental label information	
	EUH208 Contains HYDROQUINONE. May produce an allergic reaction.

2.3. Other hazards

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No information available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

2,2'-OXYBISETHANOL	< 0.5 %
CAS-No.: 111-46-6	EC No.: 203-872-2
Classification (EC 1272/2008) Acute Tox. 4 - H302	Classification (67/548/EEC) Xn;R22
DIETHANOLAMINE	1 - 2 %
CAS-No.: 111-42-2	EC No.: 203-868-0
Classification (EC 1272/2008) Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT RE 2 - H373	Classification (67/548/EEC) Xn;R22,R48/22 Xi;R38,R41
Diethylenetriamine Pentaacetic Acid Na5	< 0.2 %
CAS-No.: 140-01-2	EC No.: 205-391-3
Classification (EC 1272/2008) Acute Tox. 4 - H332 Repr. 2 - H361d	Classification (67/548/EEC) Xn;R20. Repr. Cat. 3;R63.
HYDROQUINONE	< 0.3%
CAS-No.: 123-31-9	EC No.: 204-617-8
Classification (EC 1272/2008) 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) Carc. Cat. 3;R40 Muta. Cat. 3;R68 Xn;R22 R43 Xi;R41 N;R50

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

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

No recommendation given, but first aid may still be required in case of accidental exposure. If in doubt, get medical attention!

Inhalation

Unlikely route of exposure as the product does not contain volatile substances.

Ingestion

Rinse mouth thoroughly.

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Skin contact

Rinse immediately with plenty of water.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention if any discomfort continues.

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

May cause severe irritation to eyes.

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

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

5.3. Advice for firefighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

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.

6.2. Environmental precautions

Avoid discharge into drains.

6.3. Methods and material for containment and cleaning up

Flush with plenty of water to clean spillage area. Prevent discharge of larger quantity to drain.

6.4. Reference to other sections

For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Provide good ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Keep out of reach of children.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
2,2'-OXYBISETHANOL	WEL	23 ppm	101 mg/m ³			
HYDROQUINONE	WEL		0,5 mg/m ³			

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	Liquid Water-soluble.
Colour	Colourless to pale yellow.
Odour	No characteristic odour.
Solubility	Soluble in water.
Initial boiling point and boiling range (°C)	>100 760 mm Hg
Melting point (°C)	<0
Vapour pressure	- Not Known
Evaporation rate	1 H ₂ O (water)=1
pH-Value, Diluted Solution	8.86 - 9.0

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 normal temperature conditions.

10.3. Possibility of hazardous reactions

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Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid contact with acids.

10.5. Incompatible materials

Materials To Avoid

Avoid contact with other photographic solutions and/or cleaning compounds.

10.6. Hazardous decomposition products

Irritating gases/vapours/fumes of: Sulphur dioxide.

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

No specific health warnings noted.

Ingestion

No specific health warnings noted.

Skin contact

The product contains a small amount of sensitising substance which may provoke an allergic reaction among sensitive individuals after repeated contact.

Eye contact

May cause severe irritation to eyes.

Health Warnings

Spray and vapour in the eyes may cause irritation and smarting.

Route of entry

Skin and/or eye contact.

Toxicological information on ingredients.

Toxic Dose 1 - LD 50

620 mg/kg (oral rat)

DIETHANOLAMINE (CAS: 111-42-2)

Toxic Dose 1 - LD 50

320 mg/kg (oral rat)

HYDROQUINONE (CAS: 123-31-9)

Toxic Dose 2 - LD 50

>900 mg/kg (skn-rat)

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

Toxic Dose 1 - LD 50

12, 600 mg/kg (oral rat)

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

Toxic Dose 1 - LD 50

>4000 mg/kg (oral rat)

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecological information on ingredients.

LC 50, 96 Hrs, Fish mg/l
>100 mg/L (Fathead Minnow)

DIETHANOLAMINE (CAS: 111-42-2)

LC 50, 96 Hrs, Fish mg/l
0.10-0.18 (Fathead Minnow)
EC 50, 48 Hrs, Daphnia, mg/l

HYDROQUINONE (CAS: 123-31-9)

0.05
IC 50, 72 Hrs, Algae, mg/l
1.0

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

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 be handled by a licensed hazardous waste contractor. EU Waste Number: 090101

SECTION 14: TRANSPORT INFORMATION

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.

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14.3. Transport hazard class(es)

ADR/RID/ADN Class Not classified for transportation.
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

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

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.

Information Sources

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.

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Risk Phrases In Full

R20	Harmful by inhalation.
R22	Harmful if swallowed.
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R38	Irritating to skin.
R40	Limited evidence of a carcinogenic effect.
R43	May cause sensitisation by skin contact.
NC	Not classified.
R63	Possible risk of harm to the unborn child.
R68	Possible risk of irreversible effects.
R41	Risk of serious damage to eyes.
R50	Very toxic to aquatic organisms.

Hazard Statements In Full

H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H332	Harmful if inhaled.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs <<Organs>> through prolonged or repeated exposure.
H351	Suspected of causing cancer.
H341	Suspected of causing genetic defects.
H361d	Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.