

SAFETY DATA SHEET

MULTIGRADE DEVELOPER 1+9

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME MULTIGRADE DEVELOPER 1+9
PRODUCT NO. IP881111-1+9
INTERNAL ID 10145
APPLICATION Photographic Developer Solution
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2 HAZARDS IDENTIFICATION

Not regarded as a health or environmental hazard under current legislation.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification (67/548)
HYDROQUINONE	204-617-8	123-31-9	< 1	Carc. Cat. 3;R40 Muta. Cat. 3;R68 Xn;R22 R43 Xi;R41 N;R50
SODIUM HYDROXIDE	215-185-5	1310-73-2	< 1	C;R35

The Full Text for all R-Phrases are Displayed in Section 16

4 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.

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.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

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

UNUSUAL FIRE & EXPLOSION HAZARDS

No unusual fire or explosion hazards noted.

SPECIFIC HAZARDS

Fire creates: Irritating gases/vapours/fumes of: Sulphur dioxide.

6 ACCIDENTAL RELEASE MEASURES

SPILL CLEAN UP METHODS

Do not contaminate water sources or sewer. Absorb in vermiculite, dry sand or earth and place into containers. Contain Spill. Use large quantities of water to flush small spills to sanitary sewer if local regulations permit. Do not flush to septic tank. See Section 13 for disposal considerations. Flush with plenty of water to clean spillage area. Prevent discharge of larger quantity to drain.

7 HANDLING AND STORAGE

MULTIGRADE DEVELOPER 1+9

USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Read and follow manufacturer's recommendations. Provide good ventilation.

STORAGE PRECAUTIONS

No special storage precautions noted.

STORAGE CLASS

Chemical storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

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.

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.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid Water-soluble		
COLOUR	Colourless		
ODOUR	No characteristic odour.		
SOLUBILITY	Soluble in water.		
BOILING POINT (°C)	>100 760 mm Hg	MELTING POINT (°C)	<0
RELATIVE DENSITY	1.235 20	VAPOUR PRESSURE	- Not Known
EVAPORATION RATE	1 H ₂ O (water)=1	pH-VALUE, CONC. SOLUTION	10.6
pH-VALUE, DILUTED SOLUTION	10.45 - 10.55		

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions.

CONDITIONS TO AVOID

Avoid excessive heat for prolonged periods of time. Avoid contact with acids.

HAZARDOUS POLYMERISATION

Will not polymerise.

MATERIALS TO AVOID

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

HAZARDOUS DECOMPOSITION PRODUCTS

Irritating gases/vapours/fumes of: Sulphur dioxide.

MULTIGRADE DEVELOPER 1+9**11 TOXICOLOGICAL INFORMATION****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.

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

Irritating to eyes.

HEALTH WARNINGS

No specific health warnings noted.

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

OTHER HEALTH EFFECTS

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

ROUTE OF ENTRY

Ingestion. Skin and/or eye contact.

MEDICAL CONSIDERATIONS

May aggravate existing: Pre-existing eye problems.

Name	HYDROQUINONE
Toxic Dose 1 - LD 50	320 mg/kg (oral rat)
Toxic Dose 2 - LD 50	>900 mg/kg (skn-rat)

12 ECOLOGICAL INFORMATION**ECOTOXICITY**

The product contains a substance which is harmful to aquatic organisms.

Name	HYDROQUINONE
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

13 DISPOSAL CONSIDERATIONS**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 be handled by a licensed hazardous waste contractor. EU Waste Number: 090101

14 TRANSPORT INFORMATION

	No transport warning sign required.
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
ADR CLASS	Not classified for transportation.

15 REGULATORY INFORMATION

MULTIGRADE DEVELOPER 1+9

RISK PHRASES

NC Not classified.

SAFETY PHRASES

P14 Contains HYDROQUINONE. May produce an allergic reaction.

EU DIRECTIVES

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC.

APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES

Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

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.

ISSUED BY

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GENERATED

SAFETY DATA SHEET STATUS

Approved.

RISK PHRASES IN FULL

R35	Causes severe burns.
R22	Harmful if swallowed.
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.
R50	Very toxic to aquatic organisms.