

MATERIAL SAFETY DATA SHEET

Catalogue N°: 951368 Date: 24/10/2004

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1. Identification of the substance or preparation
AUTOMATIC DEVELOPER REPLENISHER 5L

1.2. Use of the substance/preparation
 Photographic developer

1.3. Company/undertaking identification
 FUJI HUNT PHOTOGRAPHIC CHEMICALS NV.
 EUROPARK NOORD 21-22
 9100 SINT-NIKLAAS
 BELGIUM
 TEL: +32 (0)3 760 02 00
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1.4. Emergency telephone
 +32 (0)3 760 02 00

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterisation: aqueous solution
 Components contributing to hazard:

w/w%	CAS N°	EINECS N°	Components Symb. R-phrases
1-2	123-31-9	204-617-8	HYDROQUINONE XnN R:22-40-41-43-50-68
0,1-1	111-30-8	203-856-5	GLUTARALDEHYDE T R:23/25-34-42/43
0,1-1	92-43-3	202-155-1	1-PHENYL-3-PYRAZOLIDONE XnN R:22-51/53

3. HAZARDS IDENTIFICATION

Most important hazards :
 Irritating to eyes.
 Limited evidence of a carcinogenic effect.
 May cause sensitization by skin contact.
 Possible risk of irreversible effects.

4. FIRST AID MEASURES

Eye contact

Irrigate with flowing water immediately and continuously for 15 minutes.
 Consult medical personnel.

Skin contact

Immediately flush with plenty of water for at least 15 minutes while
 removing contaminated clothing

Ingestion

Consult a physician or transport to emergency facility immediately.

Inhalation

Remove to fresh air. Consult a physician.

Further information

Overexposure may lead to allergic skin reactions with sensitized people. In
 this case, seek medical advice.

5. FIRE-FIGHTING MEASURES

- 5.1. Suitable extinguishing media:
Water.
Water fog, carbon dioxide, foam, dry chemicals.
- 5.2. Extinguishing media to avoid:
None under normal conditions.
- 5.3. Further information:
Keep containers cool by spraying with water.

6. ACCIDENTAL RELEASE MEASURES

- Wear adequate personal protective equipment, see section 8 (exposure control / personal protection).
- Spills should be contained by and carried with suitable absorbent material and removed from disposal.
- Dispose of according to local and national regulations.
- Prevent from entering into soil, waterways and groundwater.

7. HANDLING AND STORAGE

- 7.1. Handling
Avoid eye and skin contact. Wash hands and exposed skin before eating, drinking or smoking and after work. Use only in a well ventilated area. Ingestion, exposure to skin and eyes and inhalation of any generated vapours should be avoided. Wear suitable protective clothing, gloves and eye/face protection. Do not consume or store food in the working area.
- 7.2. Storage
Keep containers tightly closed. Store in a well ventilated, cool, dry area. Storage temperature should be higher than +5°C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1. Exposure limit values (INGREDIENTS INFORMATION)
- | | |
|-------------------------|-------------------------------------|
| HYDROQUINONE | |
| MAK-value(TRGS 900) | = 2E mg/m ³ |
| TLV-TWA | = 2 mg/m ³ |
| GLUTARALDEHYDE | |
| MAK-value(TRGS 900) | = 0,1 ppm - 0,42 mg/m ³ |
| TLV-STEL | = 0,25 ppm - 0,46 mg/m ³ |
| 1-PHENYL-3-PYRAZOLIDONE | |
| MAK-value(TRGS 900) | = NAV |
| TLV-TWA | = NAV |
- 8.2. Exposure controls
Respiratory protection: no respiratory protection needed under normal conditions. Good ventilation should be sufficient.
Hand protection: use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials :
nitrile rubber (thickness >= 0,38 mm, breakthrough time > 480 min)
neoprene (thickness >= 0,65 mm, breakthrough time > 240 min).
butyl rubber (thickness >= 0,36 mm, breakthrough time > 480 min)
For intermittent splash protection corresponding gloves with breakthrough time > 60 min can be used.
Avoid gloves made of : natural rubber.
Eye protection: use chemical safety goggles. Eye wash fountain should be located in immediate work area.
Other: appropriate protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid
Flash point °C	: NA
Density (20°C) Kg/L	: 1.08
Solubility in water (25°C)	: Completely
pH value (25°C)	: 10.85
Viscosity	: As water

10. STABILITY AND REACTIVITY

- 10.1. Conditions to avoid
The product is stable under normal storage conditions.
- 10.2. Materials to avoid
Keep away from oxidising material(s).
- 10.3. Hazardous decomposition products
Formation of CO₂, CO, SO₂ is possible.

11. TOXICOLOGICAL INFORMATION

Acute toxicity (INGREDIENTS INFORMATION)

HYDROQUINONE		
LD50 (Oral Rat)	=	320 mg/kg
GLUTARALDEHYDE		
LD50 (Oral Rat)	=	134 mg/kg
LD50 (Dermal rabbit)	=	2560 mg/kg
LC50 (Inhalation rat)	=	480 mg/m ³
1-PHENYL-3-PYRAZOLIDONE		
LD50 (Oral Rat)	=	200 mg/kg

Eye contact

Irritating to eyes.

Skin contact

May cause sensitization by skin contact.

Further information

Limited evidence of a carcinogenic effect.

Possible risk of irreversible effects.

12. ECOLOGICAL INFORMATION

Ecotoxicity (INGREDIENTS INFORMATION)

HYDROQUINONE		
LC50 (Rainbow trout, 96h)	=	0,097 mg/l
GLUTARALDEHYDE		
LC50 (Fish, 96 hours)	=	NAv
1-PHENYL-3-PYRAZOLIDONE		
LC50 (Pimephales promelas, 96h)	=	1-10 mg/L
LC50 (Daphnia, 96h, Waterflea)	=	10 mg/L

13. DISPOSAL CONSIDERATIONS

Dispose of according to local and national regulations. Containers must be disposed of in accordance with local regulations.

EWC: 09 01 01 Water-based developer and activator solutions

14. TRANSPORT INFORMATION

Product is not classified for any mode of transportation.

UN N° : -	PSN : NON HAZARDOUS LIQUID		
ADR/RID	Class : NA	Item :NA	TREMCARD :NA
	Pack.gr.: NA		
IMDG/ADNR	Class : NA	EmS :NA	Mar.Poll. :N
	Pack.gr.: NA		
ICAO/IATA	Class : NA	Pass. < :NA	Instr. :NA
	Pack.gr.: NA	Cargo < :NA	Instr. :NA

15. REGULATORY INFORMATION

EU Classification and User Label Information:

Contains : HYDROQUINONE

Symbol(s) : Xn

R(isk) phrase(s) :

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

S(afety) phrase(s) :

- S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

Other information :

WGK: 1

16. OTHER INFORMATION

The use of the preparation is restricted to professional users!

The above mentioned data correspond to our present state of knowledge and experience. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications have not the meaning of guarantees on properties.

Date of issue: 01.04.2004

Supersedes edition of -

 NAV : Not available NA : Not applicable
 RISK PHRASES MENTIONED IN PARAGRAPH 2:
 R22 : Harmful if swallowed.
 R23/25 : Toxic by inhalation and if swallowed.
 R34 : Causes burns.
 R40 : Limited evidence of a carcinogenic effect.
 R41 : Risk of serious damage to eyes.
 R42/43 : May cause sensitization by inhalation and skin contact.
 R43 : May cause sensitization by skin contact.
 R50 : Very toxic to aquatic organisms.
 R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R68 : Possible risk of irreversible effects.

List of distributors :

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