

EC Safety Data Sheet



QR-D1 DEVELOPER REPLENISHER 10 L
CONC


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1 Commercial product name and supplier

| | | |
|-----|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.1 | Commercial product name / designation | QR-D1 DEVELOPER REPLENISHER 10 L CONC |
| 1.2 | Application / use | Photographic B&W Developer |
| 1.3 | Producer | Fuji Hunt Photographic Chemicals n.v., Europark Noord 21-22, B-9100 Sint Niklaas, Belgium (0032 376 00200) |
| 1.4 | Supplier | FUJI PHOTO FILM (UK) LTD, Fuji Film House; 125, Finchley Road, London NW3 6HY; Tel.: (0207) 5865900; |
| 1.5 | TOX emergency number | Technical Centre, Bedford: (01234) 373879; Please contact Local Hospital Accident & Emergency Department or GP who can contact the UK National Poisons Unit for advise. |
| 1.6 | BAG T No. (CH) | 611484 |
| 1.7 | Product No. | 951129 |

2 Composition

| | | | |
|-----|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 2.1 | Chemical characterisation | Aqueous solution containing organic and inorganic salts. Active ingredient: CAS No.: 123-31-9 Hydroquinone |  |
| 2.2 | Components | Components contributing to hazard (88/379/EEC): | |
| | CAS Nr. : 584-08-7 EINECS: 2095293 | 7 - 15 % | potassium carbonate |
| | | Xi: Irritant. R36/38: Irritating to eyes and skin. | |
| | CAS Nr. : 10117-38-1 EINECS: 2333211 | 5 - 10 % | potassium sulfite |
| | | N/Ap | |
| | CAS Nr. : 7757-83-7 EINECS: 2318214 | 5 - 10 % | sodium sulfite |
| | | N/Ap | |
| | CAS Nr. : 123-31-9 EINECS: 2046178 | 3 - 7 % | hydroquinone1,4-dihydroxybenzene; hydroquinone; |
| | | Xn: Harmful. N: Dangerous for the environment. R22: Harmful if swallowed. R40: Limited evidence of a carcinogenic effect. R41: Risk of serious damage to eyes. R43: May cause sensitisation by skin contact. R50: Very toxic to aquatic organisms. R68: Possible risk of irreversible effects. | |
| | CAS Nr. : 111-46-6 EINECS: 2038722 | 3 - 7 % | diethyleneglycol |
| | | Xn: Harmful. R22: Harmful if swallowed. | |

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| | | |
|----------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2.3 | Further information | None. |
| 3 | Hazards identification | Irritating to eyes. Possible risks of irreversible effects. May cause sensitisation by skin contact. Possible risk of irreversible effects. |
| 4 | First aid measures | |
| 4.1 | Eye contact | Irrigate with flowing water immediately and continuously for 15 minutes. Consult medical personnel. |
| 4.2 | Skin contact | Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing. |
| 4.3 | Ingestion | Consult a physician or transport to emergency facility immediately. |
| 4.4 | Inhalation | Remove to fresh air. Consult a physician. |
| 4.5 | 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 Controls/Personal Protection) Spills should be contained by, and covered with suitable absorbent material and removed for 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 thoroughly after handling. Wash hands and exposed skin before eating, drinking or smoking and after work. Use only in well ventilated area. |
| 7.2 | Industrial hygiene | Avoid eye and skin contact. Wear suitable protective clothing, gloves and eye/face protection. Follow normal industrial hygiene standards. Do not consume or store food in the work area. |

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- 7.3 Storage Keep containers tightly closed.
Store in a well ventilated, cool, dry area.
- 7.4 Fire- and explosion protection Not combustible.

8 Exposure controls / personal protection

- 8.1 Technical equipment Good general ventilation should be sufficient for most processing operations. Vent work area to ensure airborne concentrations are below the current occupational exposure limits. 10 or more room air changes per hour containing a minimum of 15% fresh air, will meet these requirements.
- 8.2 Control of threshold limits None established.
- 8.3 Personal protective equipment**
- 8.3.1 Respiratory protection No respiratory protection needed under normal conditions.
Good general ventilation should be sufficient.
- 8.3.2 Hand protection Neoprene or butyl rubber should be effective glove materials.
- 8.3.3 Eye protection Use chemical safety goggles.
Eye wash fountain should be located in immediate work area.
- 8.3.4 Other Appropriate protective clothing.

9 Physical and chemical properties

- 9.1 Appearance liquid
- 9.2 Color light yellow
- 9.3 Odour practically odourless
- 9.4 Change in physical state
- | | | |
|---------------|-------|----|
| Melting point | ~ 0 | °C |
| Boiling point | ~ 100 | °C |
- 9.5 Density 1.273 g/cm³ (20 °C)
- 9.6 Vapour pressure ----- mm Hg (21 °C)
- 9.7 Viscosity ----- cP
- like water
- 9.8 Solubility in water ----- g/l (20 °C)
completely soluble
- 9.9 pH-value 10.77 (25 °C)
alkaline
- 9.10 Flash point ----- °C
- 9.11 Ignition temperature ----- °C

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| | | |
|------|---------------------|----------------------------------------|
| 9.12 | Explosion limits | Lower: ---- vol.% Upper: ---- vol.% |
| | remark(s) | None. |
| 9.13 | Further information | None. |

10 Stability and reactivity

| | | |
|------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10.1 | Thermal decomposition | Is stable under normal storage conditions. |
| 10.2 | Hazardous decomposition products | In case of thermal decomposition poisonous and irritant gases/fumes can be released. Hazardous Decomposition Products: CO ₂ , SO ₂ |
| 10.3 | Hazardous reactions | With strong acids. With strong oxidisers. |
| 10.4 | Further information | None. |

11 Toxicological information

Product Information:

| | | | |
|---------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| LD50, oral: | > 2000 mg/kg | Test Animal: | Rats |
| LD50, dermal: | N/Av | Test Animal: | N/Av |
| 11.1 | Acute Overexposure: | | |
| | Primary Skin Irritation Index: | 3.25 | Rabbit (Japanese white) |
| | Primary Eye Irritation Index: | 12.7 | Rabbit (Japanese white) |
| 11.2 | Further information | Irritating to eyes. Possible risks of irreversible effects. May cause sensitisation by skin contact. Possible risk of irreversible effects. | |

Ingredients information

| CAS No. | Component | LD50 (mg/kg) | Test Animal: |
|------------|----------------------------------------------------------|--------------|--------------|
| 584-08-7 | potassium carbonate | > 2000 | Rats |
| 10117-38-1 | potassium sulfite | N/Av | |
| 7757-83-7 | sodium sulfite | 820 | Mice |
| 123-31-9 | hydroquinone, 1,4-dihydroxybenzene; hydroquinone; quinol | 320 | Rats |
| 111-46-6 | diethyleneglycol | 12565 | Rats |

12 Ecological information

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Ecotox Data: N/Av
Chemical Fate Data: N/Av

Ingredients information

| CAS No. | Component | Fish Toxicity | Fish Organism |
|------------|--------------------------------------------------------|-----------------------|----------------|
| 584-08-7 | potassium carbonate | LC50 N/Av | |
| 10117-38-1 | potassium sulfite | LC50 130 mg/L | Not identified |
| 7757-83-7 | sodium sulfite | LC50 N/Av | |
| 123-31-9 | hydroquinone1,4-dihydroxybenzene; hydroquinone; quinol | LC50 0.15 - 0.16 mg/L | Golden orfe |
| 111-46-6 | diethyleneglycol | LC50 9630/8450mg/L | Golden orfe |

| | | |
|-----------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 13 | Disposal considerations | Dispose of according to local and national regulations. Containers must be disposed of in accordance with local regulations. |
| 13.1 | EC-Waste Code | 090101 |
| 13.2 | Origin | Photographic Industry |


| | | | |
|-----------|------------------------------|--------------------------------------------------------------------|----------------------------|
| 14 | Transport information | | |
| 14.1 | GGVE / GGVS RID / ADR | Class ---- Class ---- | Cipher ---- Cipher ---- |
| | UN-No. | ---- | |
| | Tremcard | ---- | |
| | Further information | Material not classified for transport at land (road, rail, barge). | |
| 14.2 | GGVSee ADNR | Class ---- Class ---- | |
| | UN-No. | ---- | |
| | IMDG-code page | ---- | |
| | EMS | ---- | |
| | MFAG | ---- | |
| | Packing group | ---- | |
| | Further information | Material not classified for transport at sea. | |
| 14.3 | ICAO / IATA-GDR | ---- | |
| | UN-No. | ---- | |
| | PSN | ---- | |
| | Subsidiary risk | ---- | |
| | Labels | ---- | |
| | Packing group | ---- | |
| | Passenger aircraft | Packing Instruction ---- | max. ---- |
| | Cargo aircraft only | Packing Instruction ---- | max. ---- |
| | Further information | Material not classified for air transport. | |

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| | | |
|-------|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15 | Regulatory information | This product requires classification according to the criteria of the EC. |
| 15.1 | UN-No. | ----- |
| 15.2 | Swiss toxicity class | 4 |
| 15.3 | EC-No. | ----- |
| 15.4 | Hazard symbols | Xn  |
| 15.5 | Hazard designation | Xn: Harmful. Contains hydroquinone. |
| 15.6 | Risk phrases | R: 36-40-43-68 36 Irritating to eyes. 40 Possible risks of irreversible effects. 43 May cause sensitisation by skin contact. 68 Possible risk of irreversible effects. |
| 15.7 | Safety phrases | S: 26-36/37/39 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advise. 36/37/39 Wear suitable protective clothing, gloves and eye/face protection. |
| 15.8 | TLV / MAK/... | SO2: MAK 2 ppm, 5mg/m ³ , TLV 2 ppm |
| 15.9 | BVD classification | ----- |
| 15.10 | VbF | ----- |
| 15.11 | Further information | None. |
| 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.

N/Av = Not available N/Ap = Not applicable