

## Rollei R<sup>3</sup> High Speed Film Developer BLACK & WHITE

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### 1. IDENTIFICATION OF SUBSTANCE

**Product name/** ROLLEI R<sup>3</sup> HIGH SPEED  
**Trade name**  
**Use for** Photographic developer  
**Manufacturer/Supplier** Hans O. Mahn & Co, Brookstieg 4  
D 22145 Hamburg-Stapelfeld  
**Telephone number** + 49 40 237008-88  
**Fax** + 49 40 237008-488  
**Email** photo@mahn.net

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### 2. COMPOSITION/DATA ON COMPONENTS

Mixture of substances listed below with nonhazardous additions.

**Description** Mixture with inorganic and organic substances

**Dangerous components:**

Name	%	CAS-No.
hydroquinone	< 1	123-31-9
1-phenyl-3-pyrazolidone	< 1	92-43-3
sodium sulfite	< 20	7757-83-7
sodium carbonate	< 1-5	584-08-7
potassium bromide	< 2	7758-02-3

**Other Information:** Main component: Water

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### 3. HAZARDS IDENTIFICATION

**Hazard designation:** Harmful: Possible risk of irreversible effects if swallowed.  
Irritant: Irritating to eyes and skin.  
May cause sensitization by skin contact.

**Information pertaining to particular dangers for man and environment:** The mixture contain hydroquinone. This substance is classified as: carcinogen, category 3 and mutagen, category 3.

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

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### 4. FIRST AID MEASURES

**General information** Instantly remove any clothing soiled by the product.

**First aid**

<b>general</b>	Fresh air, eventual medical attention
<b>inhalation</b>	No special measure required.
<b>skin</b>	Wash with water and soap. Remove and wash contaminated clothing before reuse.
<b>eyes</b>	Flush with plenty of water at last 15 minutes. Get medical attention promptly.
<b>swallowing</b>	Rinse out mouth and then drink plenty of water. Do not induce vomiting; instantly call for medical help.

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### 5. FIRE AND EXPLOSION HAZARD

**Extinguishing media** Use agent appropriate for surrounding.

**Unsuitable extinguishing media** None

**Special fire fighting procedures** Protection against inhalation of the fire gases.

**Unusual fire and explosion hazard** Fire or excessive heat may cause production of hazardous decomposition products ( carbon monoxide, carbon dioxide, sulphur dioxide).

**Protective equipment** No special measure required.

**Other information:** Product is not combustible.

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### 6. ACCIDENTIAL RELEASE MEASURES

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**Person-related safety precautions** Wear suitable individual clothing.

**Measures for environmental protection** Do not allow to enter drainage system, surface or ground water.

**Measure for cleaning/collecting** Collect in a container and disposed of waste.

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### 7. HANDLING AND STORAGE

**Handling** Avoid the formation of dust. Avoid contact.

**Information about protection against explosions and fires** No special measures required.

**Storage** No special requirements.

Keep container tightly sealed. Temperature of storage: 5 to 25 °C

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### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

#### Additional information about design of technical systems

No further data; see item 7.

#### Components with values that require monitoring at the workplace

None

#### Additional information:

##### Personal protective and hygienic measure

The list that were valid during the compilation were used as basis. The usual precautionary measures should be adhered to general rules for handling chemicals. Keep away from foodstuffs, beverages and food. Take off immediately all contaminated clothing. Wash hands during breaks and at the end of the work.

##### Breathing equipment

Not required.

##### Protection of hands

Protective gloves.

##### Eye protection

Safety glasses

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form** Liquid

**Colour** Colourless to yellowish

**Odour** Not characteristic

**pH-value** 9,6-10,0 (at 20 °C)

**Boiling point/boiling range** ≥ 100 °C

**Melting point/melting range** ≤ 0 °C

**Flash point** Not applicable

**Self-inflammability** Product is not self igniting.

**Danger of explosion** Product is not explosive.

**Vapour pressure** Correspond to vapour pressure of water.

**Density** 1,16-1,18 g/cm<sup>3</sup> (20 °C)

**Solubility in / Miscibility with**

**Water**

Fully miscible

**Solvent content**

None

**Organic solvents**

**Water**

77 %

**Solids content**

23 %

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### 10. STABILITY AND REACTIVITY

**Thermal decomposition/ conditions to be avoided** No decomposition if used according to specifications.

**Dangerous reactions** React with strong acids. React with acids releasing Carbon dioxide

**Dangerous products of decomposition** None

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### 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

Hydroquinone	Oral LD 50	320 mg/kg (rat)
1-phenyl-3-pyrazolidone	Oral LD 50	200 mg/kg

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<b>Primary irritant effect</b> on the skin on the eyes Sensitization	sodium sulfite	Oral LD 50	4090 mg/kg
	potassium bromide	Oral LD 50	3070 mg/kg
	Irritant		
	Corrosive		

Sensitization possible by skin contact.

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### 12. ECOLOGICAL INFORMATION

<b>General notes</b>	Water hazard class 1 (German Regulation) Do not allow product to reach ground water, water bodies or sewage system.
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### 13. DISPOSAL CONSIDERATIONS

<b>Product</b>	Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated under adherence to official regulations.
<b>EWC Code:</b>	09 01 01
<b>Uncleaned packaging</b>	Recommendation: Non contaminated packaging can be used for recycling. Empty contaminated thoroughly: They can be recycled after thorough and proper cleaning.
<b>Recommended cleaning agent:</b>	Water, if necessary with cleaning agent.

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### 14. TRANSPORT INFORMATION

<b>Transport/Additional information</b>	Not dangerous according to the above specifications.
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### 15. REGULATORY INFORMATION

#### Designation according to EC guidelines

The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV).

#### Code letter and hazard designation of product:

Xn



Harmful

#### Risk phrases

40, 43, 36/38

#### Safety phrases

2, 26, 36/37/39

#### Water hazard class

1 (Self-assessment): slightly hazardous for water

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### 16. OTHER INFORMATION

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.