MATERIAL SAFETY DATA SHEET Reviewed on

acc. to 91/155 EC

Reviewed on 11.04.2008 Printing date 11.04.2008

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Rollei RLS LOW SPEED Film Developer BLACK AND WHITE

1. IDENTIFICATION OF SUBSTANCE

Product name/ ROLLEI RLS LOW SPEED

Trade name

Use for Photographic developer

Manufacturer/Supplier Hans O. Mahn GmbH & Co. KG, Brookstieg 4

D 22145 Hamburg-Stapelfeld

Telephone number + 49 40 237008-88

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. % w/w

4-methylamino-phenol-sulphate 55-55-0 < 1

Ammonium chloride 12125-02-9 < 4

Other Informations: Main component: Water

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 The mixture contain hydroquinone. This substance is classified as:

dangers for man and environment: 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.

4. FIRST AID MEASURES

General information Instantly remove any clothing soiled by the product.

First aid

general Fresh air, eventual medical attention

inhalation No special measure required.

skin Wash with water and soap. Remove and wash contaminated clothing

before reuse.

eyes Flush with plenty of water at last 15 minutes.

Get medical attention promptly.

swallowing Rinse out mouth and then drink plenty of water.

Do not induce vomiting; instantly call for medical help.

5. FIRE AND EXPLOSION HAZARD

Extinguishing mediaUse 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 informations: Product is not combustible.

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6. ACCIDENTIAL RELEASE MEASURES

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.

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 ℃

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: The list that were valid during the compilation were used as basis.

Personal protective The usual precautionary measures should be adhered to general

rules

and hygienic measure 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 equipmentNot required.Protection of handsProtective gloves.Eye protectionSafety glasses

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Liquid

ColourColourless to yellowishOdourNot characteristicpH-value8-9 (at 20 $^{\circ}$ C)Boiling point/boiling range $\geq 100 ^{\circ}$ CMelting point/melting range $\leq 0 ^{\circ}$ C

Flash point Not applicable

Self-inflamability Product is not self igniting. **Danger of explosion** Product is not explosive.

Vapour pressure Correspond to vapour pressure of water.

Density $1,0-1,05 \text{ g/cm}^3 (20 \text{ C})$

Solubility in / Miscibility with

Water Fully miscible

Solvent content None

Organic solvents

Water 77 % Solids content 23 %

10. STABILITY AND REACTIVITY

Thermal decomposition/ conditions to be avoided

No decomposition if used according to specifications.

Rollei GmbH

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Dangerous reactions Dangerous products

React with strong acids. React with acids releasing Carbon dioxide

None

of decomposition

11. TOXICOLOGICAL INFORMATION

Acute toxicity Oral LD 50 320 mg/kg (rat)

Primary irritant effect

on the skin no irritant effect on the eyes irritant effect

Sensitization no sensitization effect known.

12. ECOLOGICAL INFORMATION

General notes Water hazard class 1 (German Regulation)

Do not allow product to reach ground water, water bodies or sewage

system.

13. DISPONSAL CONSIDERATIONS

Product 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.

EWC Code: 09 01 01

Uncleaned packaging Recommendation: Non contaminated packaging can be used for

recycling. Empty contaminated thoroughly: They can be recycled

after thorough and proper cleaning.

Recommended cleaning agent: Water, if necessary with cleaning agent.

14. TRANSPORT INFORMATION

Transport/Additional information Not dangerous according to the above specifications.

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:



40, 43, 36/38

Risk phrases Safety phrases 2, 26, 36/37/39

Water hazard class 1 (Self-assessment): slightly hazardous for water

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.