

Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 20.04.2009

version no: 1

Revision: 20.04.2009

1 Identification of the substance/preparation and of the company/undertaking

· **Product details**

· **Trade name:** Roentoroll AC

· **Article number:** 104474, 104042 200L, 44434, 1379/1

· **Application of the substance / the preparation** Developer for X-ray films

· **Manufacturer/Supplier:**

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· **Further information obtainable from:** Department environment and safety

· **Information in case of emergency:** Poison Information Centre Berlin (Germany): 00 49 (0) 30 19240

2 Hazards identification

· **Hazard description:**



Xi Irritant

· **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 36/38 Irritating to eyes and skin.

· **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· **GHS label elements**



Warning

3.2/2 - Causes skin irritation.

3.3/2A - Causes serious eye irritation.

Warning

3.1/5 - May be harmful if swallowed.

· **Prevention:**

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

· **Response:**

IF ON SKIN: Wash with plenty of soap and water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a POISON CENTER or doctor/physician if you feel unwell.

Specific treatment (see label).

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

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Take off contaminated clothing and wash before reuse.

3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 584-08-7 EINECS: 209-529-3	potassium carbonate	Xi; R 36/38 Warning: 3.2/2, 3.3/2A	10-25%
CAS: 111-46-6 EINECS: 203-872-2	2,2'-oxydiethanol	Xn; R 22 Danger: 3.1.O/3	5-10%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **After inhalation:**
In case of unconsciousness place patient stably in side position for transportation.
Supply fresh air and to be sure call for a doctor.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
If symptoms persist consult doctor.
Drink plenty of water and provide fresh air. Call for a doctor immediately.

5 Fire-fighting measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Ensure adequate ventilation
- **Measures for environmental protection:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.

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Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with oxidizing and acidic materials.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

Store under lock and key and out of the reach of children.

Recommended storage temperature: 5-25°C

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.**Ingredients with limit values that require monitoring at the workplace:****III-46-6 2,2'-oxydiethanol (5-10%)**WEL Long-term value: 101 mg/m³, 23 ppm**Additional information:** The lists valid during the making were used as basis.**Personal protective equipment:****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Protective gloves

Impervious gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Butyl rubber, BR

Nitrile rubber, NBR

Penetration time of glove materialGlove material: Butyl rubber with breakthrough-time: ≥ 480 min, layer thickness: $\geq 0,4$ mmGloves made of nitrile rubber with layer thickness $>0,38$ mm and breakthrough-time >480 minGlove material: Neopren with breakthrough time: >240 min, layer thickness: $>0,65$ mm

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye protection:

Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical properties

· General Information

Form:	Fluid
Colour:	Light yellow
Odour:	Odourless

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.

· Flash point: Not applicable.**· Self-igniting:** Product is not selfigniting.**· Danger of explosion:** Product does not present an explosion hazard.**· Vapour pressure at 20°C:** 23 hPa**· Density at 20°C:** 1.359 g/cm³**· Solubility in / Miscibility with water:** Fully miscible.**· pH-value at 20°C:** 11.1**· Solvent content:**

Organic solvents:	9.3 %
Water:	49.8 %

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- Dangerous reactions** Reacts with acids, alkalis and oxidizing agents.
- Dangerous decomposition products:** Irritant gases/vapours

11 Toxicological information

- Acute toxicity:**
- Primary irritant effect:**
 - on the skin:** Irritant to skin and mucous membranes.
 - on the eye:** Irritating effect.
- Sensitization:** No sensitizing effects known.
- Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

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Irritant

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12 Ecological information

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

13 Disposal considerations

Product:**Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue

09 01 01 water-based developer and activator solutions

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

Land transport ADR/RID (cross-border)

ADR/RID class: -

Maritime transport IMDG:

IMDG Class: -

Marine pollutant: No

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: -

UN "Model Regulation": -

15 Regulatory information

Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Code letter and hazard designation of product:

Xi Irritant

Risk phrases:

36/38 Irritating to eyes and skin.

Safety phrases:

23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

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

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37/39 Wear suitable gloves and eye/face protection.

60 This material and its container must be disposed of as hazardous waste.

· **Special labelling of certain preparations:**

Contains 4-(hydroxymethyl)-4-methyl-1-phenylpyrazolidin-3-one. May produce an allergic reaction.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant R-phrases**

22 Harmful if swallowed.

36/38 Irritating to eyes and skin.

· **Department issuing MSDS:** Department product safety

· **Contact:** Mr. Krefte-Burfeind (Tetenal AG & CO.KG Norderstedt, Germany)

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

· *** Data compared to the previous version altered.**