

Material Safety Data Sheet

According to 91/155 EC

Printing date 16.04.2003

Reviewed on 16.04.2003

1 Identification of substance:

· **Product details:**

- **Trade name:** RATIONAL Special cleaner for RATIONAL CleanJet® and manuel cleaning
- **Application of the substance / the preparation** Alkaline cleaner/ detergent

· **Manufacturer/Supplier:**

RATIONAL AG
Iglinger Straße 62
D-86899 Landsberg



Tel.: +49-(0)8191 - 32 70

- **Informing department:** Qualitätsmanagement
- **Emergency information:**
Internationale Giftzentrale Tel.: +49-(0)89-19240
"Rechts der Isar"

2 Composition/Data on components:

· **Chemical characterization**

- **Description:** Mixture of the substances listed below with harmless products.

· **Dangerous components:**

CAS: 1344-09-8 EINECS: 215-687-4	Silicic acid, sodium salt	Xn; R 22-37/38-41	< 2.5%
CAS: 68188-18-1 EINECS: 269-144-1	sodium alkylsulfonate	Xi; R 36/38	< 2.5%
CAS: 1310-58-3 EINECS: 215-181-3 EC Number: 019-002-00-8	potassium hydroxide	C; R 22-35	< 2.5%

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

3 Hazards identification

· **Hazard designation:**



Xi Irritant

· **Information pertaining to particular dangers for man and environment**

R 36/38 Irritating to eyes and skin.

· **Classification system**

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.

4 First aid measures

- **General information** Instantly remove any clothing contaminated by the product.
- **After inhalation** No special measures required.
- **After skin contact**
Instantly wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.
- **After swallowing**
Rinse out mouth and then drink plenty of water.

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In case of persistent symptoms consult doctor.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray/fog. Fight larger fires with water spray/fog or alcohol-resistant foam.
- **For safety reasons unsuitable extinguishing agents** None
- **Special hazards caused by the material, its products of combustion or flue gases:**
Sulphur dioxide (SO₂)
- **Protective equipment:** Put on breathing apparatus.
- **Additional information** Collect contaminated fire fighting water separately. It must not enter drains.

6 Accidental release measures

- **Person-related safety precautions:** Avoid skin and eye contact.
- **Measures for environmental protection:**
Do not allow to enter drainage system, surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

7 Handling and storage

- **Handling**
- **Information for safe handling:** Avoid skin and eye contact.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and containers:**
Observe all local and national regulations for storage of water polluting products.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with critical values that require monitoring at the workplace:**

1310-58-3 potassium hydroxide

OES (Great Britain) Short-term value: 2 mg/m ³

- **Additional information:** The lists that were valid during the compilation were used as basis.

- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and food.
Instantly remove any contaminated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- **Protection of hands:**
Protective 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.

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· **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.

· **Eye protection:** Tightly sealed safety glasses.

9 Physical and chemical properties:

· **General Information**

Form:	Liquid
Colour:	Red
Smell:	Characteristic

· **Change in condition**

Melting point/Melting range: Not determined

Boiling point/Boiling range: Not determined

· **Flash point:** Not applicable

· **Self-inflammability:** Product is not selfigniting.

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

· **Density at 20°C** 1.165 g/cm³

· **Solubility in / Miscibility with Water:** Fully miscible

· **pH-value (1%-sol.) at 20°C:** 10.9 +/-0,5

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **Materials to be avoided:** None

· **Dangerous reactions** No dangerous reactions known

· **Dangerous products of decomposition:** Sulphur oxides (SO_x)

11 Toxicological information

· **Acute toxicity:**

· **Primary irritant effect:**

· **on the skin:** Irritating for the skin.

· **on the eye:** Irritant effect.

· **Sensitization:** No sensitizing effect known.

· **Additional toxicological information:**

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

Irritant

12 Ecological information:

· **Behaviour in environmental systems:**

· **Mobility and bioaccumulation potential:** Not determined

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- **Ecotoxicological effects:**
- **Aquatic toxicity:** Not determined
- **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **European waste catalogue**
Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**
- **ADR/RID-GGVS/E Class:** -

- **Maritime transport IMDG/GGVSea:**
- **IMDG/GGVSea Class:** -
- **Marine pollutant:** No

- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

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

15 Regulatory information

- **Designation according to EC guidelines:**
The product has been classified/labelled in accordance with EC Directives / relevant national laws.
- **Code letter and hazard designation of product:**



Xi Irritant

- **Risk phrases:**
36/38 Irritating to eyes and skin.
- **Safety phrases:**
24 Avoid contact with skin.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
37 Wear suitable gloves.
- **National regulations**
- **Water hazard class:** 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.

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· **Relevant R-phrases**

The(se) R-phrases are those of the ingredient(s) and do(es) NOT represent the classification of the preparation.

22 Harmful if swallowed.

35 Causes severe burns.

36/38 Irritating to eyes and skin.

37/38 Irritating to respiratory system and skin.

41 Risk of serious damage to eyes.

· **Department issuing data specification sheet:**

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