

Safety Data Sheet

according to Regulation (EU) No. 1907/2006

RATIONAL CARE-TAB

Revision date : 14.08.2008

00625-0016

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

Identification of the substance or preparation

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Product - No.

56.00.560, 56.00.562

Use of the substance/preparation

Preservative agent

Company/undertaking identification

Company name : Rational AG



Street : Iglinger Strasse 62

Place : D-86899 Landsberg

Inquiry office :

Produktmanagement

Tel.: ++49 (0)8191-3270

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Responsible for the safety data sheet: reinigung@rational-online.de

2. Hazards identification

Classification

Indications of danger : Irritant

R-phrases :

Irritating to eyes and skin.

3. Composition/information on ingredients

Chemical characterization (preparation)

Mixture containing following substances with additives :

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
201-069-1	77-92-9	Citric acid	> 40 %	Xi R36
210-514-9	617-48-1	Malic acid	> 20 %	Xi R36/38
204-673-3	124-04-9	Adipic acid	1 - 5 %	Xi R36

Full text of each relevant R phrase can be found in heading 16.

4. First aid measures

General information

If you feel unwell, seek medical advice.

After inhalation

Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.

After contact with skin

In case of contact with skin wash off immediately with plenty of water.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Seek medical treatment by eye specialist.

After ingestion

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Rinse out mouth thoroughly with water.
Do not induce vomiting.
Summon a doctor immediately.

5. Fire-fighting measures

Suitable extinguishing media

Water spray jet
Fire-extinguishing activities according to surrounding.

Extinguishing media which must not be used for safety reasons

None

Special exposure hazards arising from substance or preparation itself, combustion products, resulting gases

None

Special protective equipment for fire-fighters

Not required.

Additional information

Do not release chemically contaminated water into drains, soil or surface waters. Sufficient measures must be taken to retain water used for extinguishing.

6. Accidental release measures

Personal precautions

No special precautions required.

Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

Methods for cleaning up/taking up

Pick up mechanically, avoiding dust, and provide disposal in suitable recipients.
Flush away residues with water.

7. Handling and storage

Handling**Advice on safe handling**

Avoid the formation of dust.
Avoid contact with eyes, skin or mucous membrane.

Advice on protection against fire and explosion

No special protective measures against fire required.

Storage**Requirements for storage rooms and vessels**

Keep in the original sealed container.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

8. Exposure controls/personal protection

Exposure limit values**Additional advice on control parameters**

Obey TLV for common dust, if applicable.

Exposure controls**Protective and hygiene measures**

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Avoid contact with eyes and skin.
 Wash hands before breaks and at the end of workday.
 When using, do not eat, drink or smoke.
 Remove and wash contaminated clothing before re-use.

Respiratory protection

No personal respiratory protective equipment normally required.

Hand protection

Not required.

Eye protection

Safety goggles with side protection

9. Physical and chemical properties

General information

Physical state : Tablet
 Colour : White
 Odour : Characteristic

Important health, safety and environmental information

pH-Value : 2,5 (1%)

Test method

Changes in the physical state

Flash point : n.a.
 Lower explosion limits : n.a.
 Upper explosion limits :

Oxidizing properties

n.a.
 Vapour pressure : n.a.
 (at 20 °C)
 Water solubility : Soluble
 (at 20 °C)
 Partition coefficient : n. d.

Other information

Ignition temperature : n.a.
 Bulk density: approx. 800 g/L

10. Stability and reactivity

Conditions to avoid

Not known

Materials to avoid

Not known

Hazardous decomposition products

Not known

11. Toxicological information

Acute toxicity

LD50/oral/rat: Citric acid: 3000 mg/kg
 LD50/oral/rat: Adipic acid: 5700 mg/kg

Corrosive and irritant effects

Irritating to eyes and skin.

Empirical data on effects on humans

If appropriately handled and if in accordance with the general hygienic rules, no damages to health have become known.

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Further information

The product was classified on the basis of the calculation procedure of the preparation directive (1999/45/EC).
No toxicological data available.

12. Ecological information

Ecotoxicity

Citric acid :
LC50 (96h)/*Leuciscus idus*: 440 mg/l
EC50 (72h)/*Daphnia magna*: 85 mg/l
Toxicity to bacteria: > 10000 mg/l

Adipic acid:
LC50 (96h)/*Pimephales promelas*: 97 mg/l
EC50 (48h)/*Daphnia magna*: 85,6 mg/l
EC50 (96h)/*Scenedesmus subspicatus*: 31,3 mg/l

Persistence and degradability

The surfactant(s) contained in this preparation complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Bioaccumulative potential

No data available.

Further information

Do not release undiluted or in higher quantities into the groundwater, sewerage or waters.
Do not release undiluted into wastewater or drainage ditch.
Slightly water hazardous.

13. Disposal considerations

Advice on disposal

Remove in accordance with local official regulations.

Waste disposal number of waste from residues/unused products

200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing dangerous substances
Classified as hazardous waste.

Contaminated packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

14. Transport information

Further Information

No hazardous material as defined by the transport regulations.

15. Regulatory information

Labelling

Additional advice on labelling

According to EC-regulations the product is to be labelled as follows:

Danger symbols :



Xi - Irritant

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R phrases

36/38 Irritating to eyes and skin.

S phrases

02 Keep out of the reach of children.

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

28 After contact with skin, wash immediately with plenty of water .

46 If swallowed, seek medical advice immediately and show this container or label.

24/25 Avoid contact with skin and eyes.

EU regulatory information

1999/13/EC (VOC) : 0 %

Additional information

This product complies with the criteria developed in the Regulation (EC) No. 648/2004 on detergents.

National regulatory information

Water contaminating class (D) : 1 - slightly water contaminating

16. Other information**Full text of R-phrases referred to under sections 2 and 3**

36 Irritating to eyes.

36/38 Irritating to eyes and skin.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product (s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

"(n.a. = not applicable; n.d. = not determined)"

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)