



Material Safety Data-Sheet

(ANSI Z400.1-2004)

Preparation Date: August 9, 2008

Version: 1.0

RATIONAL CARE-TAB®

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Rational Care-Tab®

PRODUCT NO: 56.00.562

APPLICATION: Preservative agent

MANUFACTURER/SUPPLIER:

Rational AG

Iglinger Strasse 62

D-86899 Landsberg

Germany

Germany phone #: 011 49 (0)8191-3270 Germany Fax #: 011 49 (0)8191-21735

Responsible contact for safety data sheet in Germany: reinigung@rational-online.de
in the United States call Info Trac 1-800-535-5053

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

POTENTIAL HEALTH EFFECTS: (Also see section 11)

CAUTION: IRRITANT TO SKIN AND EYES

ROUTES OF ENTRY: Skin and eye contact and ingestion.

CARCINOGENICITY: NTP: No, IARC: No, OSHA: No

Appearance/Odor: White tablets with a product specific odor.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1000)



WHMIS Classification : Class D 2B

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Mixture of substances shown with additives.

Component	CAS#	% By Wt.
Citric acid	77-92-9	>40
Malic acid	617-48-1	>20
Adipic acid	124-04-9	1 – 5



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4. FIRST AID MEASURES:

SKIN: Remove contaminated clothing and shoes. Wash off immediately with large amounts of water.

EYES: Hold eyes open and flush for at least 15 minutes with large amounts of water. Get medical attention if irritation occurs.

INGESTION: Do not induce vomiting. Rinse out mouth with plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

INHALATION: Remove individual to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion. If breathing is difficult, seek medical attention.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use extinguishing media suitable for surrounding the fire.

FIRE FIGHTING: Use self-contained breathing apparatus and full protective clothing. Do not release chemically contaminated water into drains, soils or surface waters. Sufficient measures must be taken to retain water used for extinguishing media.

6. ACCIDENTAL RELEASE MEASURES:

SPILL AND LEAK PROCEDURES: Wear protective equipment to prevent contact. Keep unprotected persons away. Collect mechanically into a suitable container. Flush away residues with water. Do not allow product to enter sewers or water bodies.

7. HANDLING AND STORAGE

HANDLING: Avoid contact with skin, eyes or clothing. Remove contaminated clothing and wash before re-use. Prevent formation of dust. Do not breathe dust.

STORAGE: Keep in original stored containers. Keep in well ventilated area away from food, drink and animal feedstuffs.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

Observe TLV for common dust, if applicable.

ENGINEERING CONTROLS: No special controls needed.



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RESPIRATORY PROTECTION: Respiratory protection is not required under normal conditions of use. Use NIOSH approved respirator for exposure to dust.

SKIN PROTECTION: Avoid contact with skin and eyes. Hand protection not normally required. Remove and wash contaminated clothing before re-use.

EYE PROTECTION: Safety goggles with side protection.

General Hygiene: Wash thoroughly after handling. Immediately remove soiled and contaminated clothing. Wash before re-use. Do not eat, drink or smoke in work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM:	Tablets
COLOR:	White
ODOR:	Product specific
pH: (1%).....	2.5
FLASH POINT:	NA
LOWER EXPLOSION LIMIT:.....	NA
UPPER EXPLOSION LIMIT:.....	NA
IGNITION TEMPERATURE:	NA
SOLUBILITY IN WATER:	Soluble @ 20 °C (68 °F)
BULK DENSITY:.....	~800 g/L

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

INCOMPATIBILITIES: None known.

11. TOXICOLOGICAL INFORMATION

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

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

Irritant effects: Skin and eye irritant.

General data on effects on humans: If handled appropriately in accordance with the general hygiene practices, no damages to health have become known.



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12. ECOLOGICAL INFORMATION

Do not release undiluted or in high quantities into groundwater, sewage or surface waters. Considered to be slightly water hazardous.

Ecotoxicity:

Citric acid: LC50 (96 h)/ Leuciscus idus: 440 mg/l
EC50 (72 h)? Daphnia magnus: 85 mg/l
Toxicity to bacteria: > 10000 mg/l
Adipic acid: LC50 (96 h)/Pimephales promelas: 97 mg/l
EC50 (48 h)/ Daphnia magna: 85.6 mg/l
EC50 (96 h)/ Scenedesmus subspicatus: 31.3 mg/l

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with Federal, Provincial or Local regulations. Considered to be a hazardous waste.

14. TRANSPORT INFORMATION

TDG/DOT Classification: Not regulated.

15. REGULATORY INFORMATION

All components of this product are on the TSCA Inventory.

SARA Title III:

To the best of our knowledge this product contains **no** toxic chemicals subject to the supplier notification requirements of Section 313 of the Superfund Amendments and Reauthorization Act (SARA/EPCRA) and the requirements of 40 CFR Part 372.

Note: Entries under this section cover only those regulations typically addressed in the MSDS generating process, such as, TSCA, and EPCRA/SARA Title III.

16. OTHER INFORMATION

HAZCOM / WHMIS LABEL:

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This MSDS was revised to conform to the American National Standard,
ANSI Z400.1-2004

To the best of our knowledge, the information contained in this MSDS is accurate. It is intended to assist the user in his evaluation of the product's hazards, and safety precautions to be taken in its use. The data on this MSDS relate only to the specific material designated herein. We do not assume any liability for the use of, or reliance on this information, nor do we guarantee its accuracy or completeness.

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