

**SAFETY DATA SHEET**  
VOLTRONIC RADIATOR FLUSH R10

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**1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING**

**Product name:** VOLTRONIC RADIATOR FLUSH R10

**Product code:** R 10

**Synonyms:** KÜHLERREINIGER

**Use of substance / preparation:** Cleaner liquid

**Company name:** VOLTRONIC & ACT GmbH

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**2. HAZARDS IDENTIFICATION**

**Main hazards:** No significant hazard.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

**Hazardous ingredients:** KATIONISCHE, ANIONISCHE UND NICHTIONOGENE KORROSIONSIHIBITOREN <1%

[Xn] R22; [Xi] R38; [Xi] R41; [Xn] R48/22; [N] R50

- 2-BUTOXYETHANOL 1-10%

EINECS: 203-905-0 CAS: 111-76-2

[Xn] R20/21/22; [Xi] R36/38

- K-SALZ AUS PHOSPHATIERTEM ALKYLETHOXYLAT 1-10%

[Xi] R36/38

**4. FIRST AID MEASURES (SYMPTOMS)**

**4. FIRST AID MEASURES (ACTION)**

**Skin contact:** Wash immediately with plenty of soap and water.

**Eye contact:** Bathe the eye with running water for 15 minutes.

**Ingestion:** Consult a doctor.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing media:** Carbon dioxide. Alcohol resistant foam. Dry chemical powder. Water.

**Protection of fire-fighters:** Wear protective clothing to prevent contact with skin and eyes.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:** Refer to section 8 of SDS for personal protection details.

[cont...]

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**Environmental precautions:** Do not discharge into drains or rivers.

**Clean-up procedures:** Mix with sand or vermiculite. Wash the spillage site with large amounts of water.

**7. HANDLING AND STORAGE**

**Handling requirements:** Ensure there is sufficient ventilation of the area.

**Storage conditions:** Store in cool, well ventilated area. The floor of the storage room must be impermeable to prevent the escape of liquids.

**Suitable packaging:** Must only be kept in original packaging. Polyethylene.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Hazardous ingredients:** 2-BUTOXYETHANOL

WEL (8 hr exposure limit): 25 ppm WEL (15 min exposure limit): 50 ppm

**Engineering measures:** The floor of the storage room must be impermeable to prevent the escape of liquids.

**Respiratory protection:** Respiratory protection not required.

**Hand protection:** Protective gloves. Breakthrough time of the glove material > 4 hours.

**Eye protection:** Safety glasses.

**Skin protection:** Protective clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**State:** Liquid

**Colour:** Colourless

**Odour:** Characteristic odour

**Evaporation rate:** Slow

**Solubility in water:** Miscible in all proportions

**Viscosity:** Non-viscous

**Viscosity value:** 1,2

**Viscosity test method:** Kinematic viscosity in 10<sup>-6</sup> m<sup>2</sup>/s at 40°C (ISO 3104/3105)

**Boiling point/range°C:** 100

**Relative density:** 1,01

**VOC g/l:** 50

**10. STABILITY AND REACTIVITY**

**Stability:** Stable under normal conditions.

**11. TOXICOLOGICAL INFORMATION**

**Hazardous ingredients:** 2-BUTOXYETHANOL

IVN RAT LD50 307 mg/kg

ORL MUS LD50 1230 mg/kg

ORL RAT LD50 470 mg/kg

**12. ECOLOGICAL INFORMATION**

**Mobility:** Soluble in water.

**Persistence and degradability:** Biodegradable.

**Bioaccumulative potential:** No bioaccumulation potential.

**Other adverse effects:** Negligible ecotoxicity.

**13. DISPOSAL CONSIDERATIONS**

**Disposal operations:** D8 Biological treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are disposed of by means of any of the operations in this Annex.  
R2 Recycling/reclamation of organic substances which are not used as solvents.

**Disposal of packaging:** May be reused following decontamination. Clean with water.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

**14. TRANSPORT INFORMATION****ADR / RID**

**UN no:** -

**Shipping name:** "NOT SUBJECT TO ADR"

**IMDG / IMO**

**UN no:** -

**IATA / ICAO**

**UN no:** -

**15. REGULATORY INFORMATION**

**Hazard symbols:** No significant hazard.

**Safety phrases:** S2: Keep out of the reach of children.

**Water hazard class:** 1 Classification by VwVwS

**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

**16. OTHER INFORMATION**

**Risk phrases used in s.3:** R22: Harmful if swallowed.  
R38: Irritating to skin.  
R41: Risk of serious damage to eyes.  
R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed.  
R50: Very toxic to aquatic organisms.

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R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

R36/38: Irritating to eyes and skin.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.