

<p>EVERSTAR ISO 9002</p>	<p>SAFETY DATA SHEET RETIGO CLEANING AGENT</p>	
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1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY:

1.1. Company identification:

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1.2. Substance/preparation identification:

Trade name: **RETIGO CLEANING AGENT**

Product use: Industrial cleaner.

2. COMPOSITION / INFORMATION ON INGREDIENTS:

2.1. Hazardous substances:

Chemical name: Sodium hydroxide
CAS No.: 1310-73-2
EINECS No.: 215-185-5
Content (wt. %): 25 - 50 %
Classification: C - Corrosive
Risk phrases: R 35

Chemical name: Potassium hydroxide
CAS No.: 1310-58-3
EINECS No.: 215-181-3
Content (wt. %): < 2,5 %
Classification: C - Corrosive
Risk phrases: R 22 - 35

Ingredient name: Lutensol GD70

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Characteristics: active substance - surfactant
 Content (wt. %): 2,5 - 10 %
 Classification: X_i - Irritant
 Risk phrases: R 36

3. HAZARDS IDENTIFICATION:

Hazardous symbol: Corrosive

C



Risk phrases: **R 35** Causes severe burns.

4. FIRST-AID MEASURES:

- 4.1. **General instructions:** Take off immediately all contaminated clothing. Transport in stabilized position in case of unconsciousness.
- 4.2. **Eye contact:** Irrigate the eyes with copious amount of water for at least 15 minutes, seek medical attention.
- 4.3. **Skin contact:** Take off contaminated clothing. Wash skin with copious amount of water. Cover burns by sterile gauze. Seek medical attention.
- 4.4. **Inhalation:** Remove to fresh air, rest and keep warm. Oxygen application if breathing is difficult. Seek medical attention.
- 4.5. **Ingestion:** Wash out mouth with copious amount of water. Do not induce vomiting. Seek medical attention.

5. FIRE-FIGHTING MEASURES:

- 5.1. **Suitable extinguishing media:** Water spray, carbon dioxide, foam, dry powder.
- 5.2. **Unsuitable extinguishing media:** Unknown.

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- 5.3. Special exposure hazard:** Combustion products - emits toxic fumes under fire conditions. Resulting gases - carbon monoxide, carbon dioxide. Reaction of preparation with metals (lead, aluminium, zinc, magnesium) – emits hydrogen gas.
- 5.4. Special protective equipment:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES:

- 6.1. Personal precaution:** Use personal protective equipment. Avoid all contact.
- 6.2. Environment precaution:** Prevent from soil contamination. Keep away from drains. Dilute by copious amount of water.
- 6.3. Methods for cleaning up:** Absorb on sand or vermiculite and place in closed container for disposal. Ventilate area and wash spill site after material pickup is complete. To be disposed as hazardous waste.

7. HANDLING AND STORAGE:

- 7.1. Handling:** Keep rules for hazardous chemicals handling. Use personal protective equipment. Avoid contact with eyes and skin. Keep container tightly closed if handling. Do not breathe vapour, spray. Do not mix with acids. Keep away from metals (as aluminium, magnesium, lead, zinc) – hydrogen release possibility. Transport in special plastic transport containers.
- 7.2. Storage:** Store in tightly closed vessels in a cool dry dark place, protected from direct sunshine. Store at temperature 5 – 30 °C. Keep locked up and out of reach of children. Store separately from acids. Storage in aluminium containers prohibited.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

- 8.1. Engineering control measures:** None.
- 8.2. Exposure controls:**
CAS No.1310-73-2, Sodium hydroxide, NPK-P 0.5 mg.m⁻³, NPK-M 1.0 mg.m⁻³

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8.3. Personal protection: Hand protection – alkali-resistant gloves, skin protection - protective clothing, eyes protection - safety goggles. Respiratory system protection – suitable respiratory system equipment required during spraying (respirator, gasmask). Do not breathe vapour. When using do not eat, drink or smoke. Take off contaminated clothing and wash hands.

9. PHYSICAL AND CHEMICAL PROPERTIES:

- 9.1. **Appearance (at 20 °C):** Liquid.
- 9.2. **Colour:** Brown.
- 9.3. **Smell:** Typical after the materials.
- 9.4. **pH value (10 g/l):** ca 13
- 9.5. **Freezing point:** No data.
- 9.6. **Boiling point:** > 100 °C
- 9.7. **Density:** ca 1.37 g.cm⁻³
- 9.8. **Flashpoint:** No data.
- 9.9. **Flammability:** Non-flammable.
- 9.10. **Risk of exposure:** Non-hazardous material.
- 9.11. **Vapour pressure:** No data.
- 9.12. **Oxidizing properties:** None.
- 9.13. **Solubility (at 20 °C):** 100 % in water.
- 9.14. **Content of sol. substances:** Organic 0 %

10. STABILITY AND REACTIVITY:

- 10.1. **Stability:** Stable at room temperature.
- 10.2. **Conditions to avoid:** Keep away from freeze.
- 10.3. **Materials to avoid:** Strong acids and light metals. Exothermic reaction with acids. Release of hydrogen gas by reaction with metals.
- 10.4. **Hazardous decomposition products:** Hydrogen gas by reaction with metals. Reaction of solution with carbon dioxide from air – resulting sodium carbonate and sodium hydrogen carbonate.

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11. TOXICOLOGICAL INFORMATION:

Oral toxicity: LD₅₀ orl-rat 2000 mg.kg⁻¹ for sodium hydroxide
LD₅₀ orl-rat 365 mg.kg⁻¹ for potassium hydroxide

Primary irritating effect: skin and mucous membranes – strong irritation, eyes – strong irritation.

12. ECOLOGICAL INFORMATION:

Min. 90% bio-degradability. Harmful to aquatic organisms (fish, plankton) – pH value. Do not discharged concentrated preparation into drains. Neutralisation required.

13. DISPOSAL CONSIDERATIONS:

This material and/or its contaminated container must be disposed of as hazardous waste. Neutralisation required before discharge into drains. Dilute by copious amount of water. Observe all federal, state and local environmental regulations.

14. TRANSPORT INFORMATION:

14.1. Road (ADR/RID):

Class 8 UN No: 3266 Kemler code: 80 Packing group: II

Proper shipping name: Corrosive liquid, basic, inorganic (sodium hydroxide)

14.2. Air (ICAO/IATA):

Class 8 UN No.: 3266 Packing group: II Packing Inst. 808 (812)

Proper shipping name: Corrosive liquid, basic, inorganic, n.o.s.

15. REGULATORY INFORMATION:

Hazardous symbol(s): Corrosive - C

Risk phrases:

R 35 Causes severe burns.

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Safety phrases:

- S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S 27 Take off immediately all contaminated clothing.
- S 28 After contact with skin, wash immediately with plenty of water.
- S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

Hazardous substances: sodium hydroxide, potassium hydroxide

16. OTHER INFORMATION:

The above information has been collected with the utmost care but does not purport to be all inclusive and shall be used only as a guide. EVERSTAR s.r.o. shall not be held liable for any damage, of whatever nature, that might be caused by the use of this product and / or by the information presently submitted.

Verified/date: 30.03.2004

Revised/date: