



SAFETY DATA SHEET

1. Identification of the Substance and Company

CIP 100

Alkaline Process and Research Cleaner

Product No. 1D10

MSDS No. 1D10

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2. Hazards Identification: Corrosive to eyes, skin, mouth throat and stomach. Spray mists are extremely irritating to mucous membranes and upper respiratory tract.

3. Composition/Information on Ingredients

Hazardous Component(s)	% By Wt.	CAS No.	EU No.	Symbol	R Phrases	Oral LD ₅₀	LC ₅₀
Potassium Hydroxide	10 - 30	1310-58-3	215-181-3	C	R35	365 mg/kg (rat)	ND
Tetrasodium EDTA	1 - 5	64-02-8	200-573-9	[Xi]	[R36/38]	>2000mg/kg (rat)	ND

4. First Aid Measures

Eye Contact: Flush eyes immediately with water for at least 15 minutes. Get medical attention.

Skin Contact: Flush skin immediately with plenty of water for at least 15 minutes. Get medical attention.

Inhalation: Remove patient to fresh air. If not breathing, give artificial respiration. Get medical attention.

Ingestion: Do not induce vomiting. Get medical attention. Do not give anything by mouth to an unconscious person. If conscious, drink large quantity of milk or water.

5. Fire-Fighting Measures

Conditions of Flammability/Flash Point/Auto-ignition Temperature: Not flammable.

Upper Flammable Limit: NA **Lower Flammable Limit:** NA

Special Hazards: Can react with soft metals to evolve flammable hydrogen gas.

Explosibility Data: ND **Extinguishing Media:** Use media appropriate for the primary source of fire.

Special Fire Fighting Procedures: None known. **Hazard Combustion Products:** CO, CO₂

6. Accidental Release Measures: Ensure suitable personal protection during removal of spillages. Spills should be contained and may be cautiously neutralized with a weak acid solution, or absorbed on appropriate material and placed in a container for disposal. Wash contaminated areas with large quantities of water to a sanitary sewer. Washings should be prevented from entering surface water/storm drains. Local regulations should be observed.

7. Handling and Storage **7.1 Handling:** For industrial use only. Read label before use. Avoid all contact with skin, eyes and mouth. Wear appropriate protective clothing [See Section 8.2]. Wash hands and exposed skin thoroughly after use. Launder contaminated clothing before reuse.

7.2 Storage: Keep in original container. Keep out of reach of children.

8. Exposure Control/Personal Protection

8.1 Occupational Exposure Limits: Potassium hydroxide: ACGIH TLV = 2 mg/m³ (ceiling); UK HSE EH40 STEL = 2 mg/m³

8.2 Personal Protection: Respirator Protection: Where engineering controls are impractical, use NIOSH-approved respirator appropriate for conditions.

Eye Protection: Chemical splash goggles and face shield.

Protective Gloves: Rubber.

Other Protective Clothing and Equipment: Rubber apron and rubber boots.

Engineering Controls/Ventilation: Local exhaust ventilation recommended to maintain air concentrations below established limits.

9. Physical and Chemical Properties

Solubility in Water: Complete

Specific Gravity: Approximately 1.27

Physical State/Appearance/Odor: Clear, light straw liquid. Slight chemical odor.

pH: (1% solution) Approximately 12.3 – 12.8

pH: (concentrate) > 13

Odor Threshold, Vapor Pressure, Vapor Density, Evaporation Rate, Boiling Point and Freezing Point: ND

Coefficient of Water/Oil Distribution: NA

10. Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur.

Incompatible Materials: Acids, soft metals, oxidizers, organic halogen compounds.

Conditions to Avoid/Conditions of Reactivity: None known. **Hazardous Decomposition or Byproducts:** CO, CO₂

11. Toxicological Information

11.1 Acute (Primary Routes of Exposure)

Eyes (Irritancy): Corrosive. Causes burns. Mists of use dilution cause irritation.

Skin (Irritancy or Sensitization): May cause severe irritation or burns.

Inhalation: Mists extremely irritating to mucous membranes, upper respiratory tract.

Ingestion: Corrosive to mouth, throat and stomach. Oral LD₅₀ (rat) = 860 mg/kg.

11.2 Long Term Exposure: None known.

Carcinogenicity: IARC, NTP and OSHA do not list this product or its ingredients as carcinogens.

Reproductive Toxicity/Teratogenicity/Mutagenicity/Toxicologically Synergistic Products: ND

12. Ecological Information: Aquatic Toxicity: LC50 (10% Solution)(Pimephales promelas) > 750 mg/L

The surfactant contained in this preparation complies 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.

13. Disposal Considerations: Do not contaminate ponds, waterways, or ditches with chemical or used containers.

Empty containers should be rinsed thoroughly and discarded in an appropriate waste container. [Containers may be offered for reconditioning/recycling.] Empty containers should not be used for other purposes. Unused material may be a hazardous waste due to its high pH and subsequent corrosivity. Disposal of unwanted product should be done in accordance with local, state or national legislation. Product may be flushed to a sanitary sewer with copious amounts of water, if in accordance with state, local and federal regulations. For additional guidance, contact the State Water Board or the Regional Office of the EPA.

14. Transport Information: Ground: Potassium Hydroxide Solution, 8, Corrosive, UN 1814, PG II

Road/Rail: ADR/RID Class: UN 1814, Potassium Hydroxide Solution, 8, 42(b) ADR

Sea: IMDG Class: Potassium Hydroxide Solution, 8, Corrosive, UN 1814, PG II

Air: ICAO/IATA Class: Potassium Hydroxide Solution, 8, Corrosive, UN 1814, PG II ; (4 x 1 gal. package not approved for air shipment)

15. Regulatory Information

EU Regulations: This preparation is classified as dangerous as defined by the UK Chemicals (Hazard Information and Packaging for Supply) Regulations. These regulations implement a number of EC Directives including the Dangerous Substances Directive (67/548/EEC and amendments), the Dangerous Preparations Directive (1999/45/EEC and amendments) and the Safety Data Sheets Directive (91/155/EEC and amendment).

EEC Classification: CORROSIVE, HARMFUL

Hazard Symbol: C, X_n

Risk Phrases: R35: Causes severe burns, R22: Harmful if swallowed

Safety Phrases: S2: Keep out of reach of children. S24/25: Avoid contact with eyes and skin. S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice, S36/37/39: Wear suitable protective clothing, gloves and full eye/face protection, S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WHMIS Classification: E – Corrosive Material

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulation.

16. Other Information: The information on this sheet is not a specification and does not guarantee specific properties. The information is intended to provide general knowledge as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product or where instruction or recommendations are not followed.

NA - Not Applicable

ND - No Data