



NATIONAL REFRIGERANTS

Multi Kleen

Safety Data Sheet

1. Product and Company Identification

1.1.Product Name: Multi Kleen

1.2.Distributor: National Refrigerants Ltd.,
4 Watling Close
Sketchley Meadows Industrial Estate
Hinckley
Leistershire
LE10 3EZ

1.3.Emergency Telephone No.:

IN AN EMERGENCY DIAL 999 (UK Only)
For specialist advice in an emergency telephone
+441455 630790

2. Composition/Information on Ingredient

Chemical Description: Potassium hydroxide preparation
Hazardous Component: Potassium Hydroxide
Sodium Metasilicate
Sodium xylene sulphonate
Tall oil fatty acid
Surfactant

3. Hazard Identification

Overview: Danger! Corrosive, harmful or fatal if swallowed, irritant to eyes and skin.

Potential Health Effects:

Inhalation: Inhalation of vapours or mist may be corrosive or irritant to respiratory tract.

Eye contact: May cause burns, redness, tearing and/or blurred vision

Skin contact: May cause burns, defatting and/or dermatitis.

Ingestion: Harmful or fatal if swallowed.

Chronic effects: None known.

4. First Aid Measures

Inhalation: Remove victim to fresh air and keep warm. If breathing fails give artificial respiration. Authorised personnel may give oxygen if breathing is laboured. Obtain immediate medical attention.

Eye Contact: Flush eye for at least 15 minutes holding the eye open. Obtain immediate medical attention.

Skin contact: Flush with water or soap and water for 15 minutes or until all traces have been removed. Seek medical attention if symptoms develop and persist.

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Ingestion: DO NOT INDUCE VOMITING. Give 3 to 4 cups of water if conscious. Aspiration into lungs may cause chemical pneumonia. Get immediate medical attention. If spontaneous vomiting occurs, keep head below hips.

See also Section 11.

5. Fire Fighting Measures

Extinguishing Media: Dry Powder, Carbon dioxide (CO₂) or foam.

Fire Fighting Protective Equipment: Fire-fighters wear protective clothing and self-contained breathing apparatus.

6. Accidental Release Measures (Spillage)

Isolate hazard area. Keep unnecessary and unprotected personnel away.

Land Spill: Dike and contain spill. Neutralise with weak acid. Pump liquid to an appropriate container for disposal. Put contaminated soil in appropriate container for disposal. Label containers immediately. Clean up remainder with absorbent materials. Wet down with plenty of water & remove immediately.

Water Spill: Product is soluble in water. Contain as best as possible. Contact authorities if bodies of water will be contaminated.

7. Handling and Storage

Handling: Isolate from oxidisers, acids, heat and open flame. Use only with adequate ventilation. Do not get in eyes, on skin and/or clothing. Wear full face shield. Wear gloves and apron/protective suit that are impervious to this material. After handling this product wash hands before eating, drinking or smoking. If contact occurs remove contaminated clothing. If needed take first aid action shown above. Launder contaminated clothing before reuse.

Storage: Store in a dry place protected against moisture and water. Keep well separated from acids and acidic materials.

8. Exposure Controls & Personal Protection

Occupational Exposure Limits

Engineering Controls: Adequate ventilation to control vapour accumulation. Local or mechanical ventilation.

Personal Protection:

Respiratory: If exposure limits are exceeded or mist is present use an appropriate cartridge filter for dusts, fumes and mists.

Hand: Use nitrile gloves or PVC gauntlets.

Eye: Use full-face shield.

Skin: Wear apron/protective suit that is impervious to this material. Wash clothing before reuse.

9. Physical and Chemical Properties

Appearance: Water white liquid.

Odour: No apparent odours.

pH: > 12.5

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Boiling Point: ND
Melting Point: ND
Flash Point: Not applicable.
Flammability Upper: Not applicable.
Flammability Lower: Not applicable.
Vapour Dencity (Air = 1): 0.4
Specific Gravity: 1.12

10. Stability and Reactivity

Stability: Stable.

Conditions to Avoid: Isolate from oxidisers, acids, heat and open flame.

Materials to Avoid: Isolate from strong oxidisers such as permanganates, chromates and peroxides.

Recommended Materials for equipment: Mild Steel, 316, polythene.

Hazardous Decomposition products: From combustion sodium oxide and hydroxide, silicon dioxide, potassium oxide and hydroxide.

11. Toxicological Information

Potassium Hydroxide	LD50: 1,2g/kg	(oral-rat)
Sodium Metasilicate	No data available	
Sodium xylene sulphonate	No data available	
Tall oil fatty acids	No data available	
Surfactant	LD50: 1.4 ml/kg	(oral-rat)
	LD50: >5g/kg	(dermal-rabbit)

12. Ecological Information

No data available.

13. Disposal Considerations

Disposal Method: Dispose as hazardous waste in accordance with legislation. Do not dispose as domestic waste.

Contaminated Packaging: Empty completely and rinse with water.

14. Transport Information

Packaging size: 1 & 5 US gallon plastic bottles.

Class (ADR): 8

UN Number: UN1760

Packing Group: III

Proper Shipping Name (ADR): UN 1760 Corrosive liquid N.O.S. (Potassium hydroxide), 8, III

15. Regulatory Information

Supply Classification Hazard Pictogram: Corrosive.



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- Risk Phrases:** 35 Causes sever burns
Safety Phrases: 2 Keep out of the reach of children
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
37/39 Wear suitable gloves and eye/face protection.

16. Other Information

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