

# MATERIAL SAFETY DATA SHEET

## KASTLE-MEYER REAGENT

### 1. IDENTIFICATION OF PRODUCT AND SUPPLIER

Product Name: Kastle-Meyer Solution

Supplier: Scenesafe<sup>®</sup> Business Unit  
2920 Trident Court  
Solihull Parkway  
Birmingham Business Park  
BIRMINGHAM  
B37 7YN  
Tel: 0870 609 2385

### 2. COMPOSITION

Potassium hydroxide 10% CAS: 1310-58-3

Zinc granules

Distilled water

Ethanol 50% CAS: 64-17-5

Phenolphthalein 1%

### 3. HAZARDS IDENTIFICATION

C: Corrosive. Causes severe burns.

F: Highly Flammable

Potential Health Effects: causes severe burns and irritation to eyes and skin. If ingested, causes severe internal irritation and damage.

### 4. FIRST AID MEASURES

Skin contact – In the case of skin contact, wash the splashed surface with large quantities of running water for at least 10 minutes.

Eye contact – If the substance has entered the eyes, wash out with running water or saline solution for at least 15 minutes. *Obtain medical attention.*

Ingestion – If the chemical has been confined to the mouth, give large quantities of water as a mouthwash – ensure mouthwash is not swallowed. If the chemical has been swallowed, wash mouth out thoroughly with water and give repeated drinks of water (about 180ml) every 10 minutes. *Obtain immediate medical attention.*

Inhalation – Not applicable.

### 5. FIRE FIGHTING MEASURES

Special risks – Ethanol content produces a potentially explosive vapour/air mixture.

Extinguishing media – Use extinguishing media appropriate to the surrounding fire conditions due to small quantity used.

### 6. ACCIDENTAL RELEASE MEASURES

Personal protection – Wear goggles/safety spectacles, gloves and protective clothing.

Spillages – Remove all sources of ignition. Wash to drain with large amounts of water. Any absorbent material used should be placed into a chemical waste container and disposed of via a specialist chemical waste disposal stream.

Clean-up procedures – Wash the spillage site with water and soap/detergent. Ventilate area to dispel residual vapour.

### 7. HANDLING AND STORAGE

Handling precautions – Take precautions against static discharge. Avoid contact with skin and eyes. Wash hands afterwards.

Storage precautions – Keep containers closed. For technical reasons, store in a refrigerator at 4°C. Keep away from incompatible materials (see section 10).

*Do not decant.*

### 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Personal protection – Wear goggles/safety spectacles, gloves and protective clothing.

Exposure controls – Not applicable due to quantities in use.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Colourless alkaline liquid in the presence of zinc granules.

No perceptible odour

pH strongly alkaline

Flash point: 16.6°C

Explosion limits: Lower 3.3 vol%  
Upper 19.0 vol%

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## 10. STABILITY AND REACTIVITY

Chemical Stability – Shelf life is 6 months if stored in a refrigerator at 4°C when not in use.

Conditions to avoid – Incompatible materials. Contact with acids and ammonium salts. Ignition sources, excess heat, oxidisers.

Chemical incompatibilities – (amongst others) metals, oxidising and reducing agents. Strong reaction to zinc stabilises product quality.

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## 11. TOXICOLOGICAL INFORMATION

High toxicity.

After skin contact – Pain and irritation at site of contact. Redness or whiteness occasionally followed by blistering.

After eye contact – Irritation, pain, redness and watering. Severe corneal burns can occur.

After inhalation – Shortness of breath, sore throat.

After ingestion – If swallowed there is immediate severe irritation. Corrosive burns may occur. Nausea, vomiting and stomach pain.

Further data – No carcinogenic or mutagenic properties identified. Evidence of reproductive effects.

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## 12. ECOLOGICAL INFORMATION

Ecotoxicity Not available.  
Persistence Not available  
Appraisal Not available.

No environmental hazard is anticipated providing that the material is handled and disposed of with due care and attention.

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## 13. DISPOSAL CONSIDERATIONS

Waste disposal – Chemical residues are generally classified as special waste and as such are covered by regulations which vary according to location. Contact your local waste disposal authority for advice or use a recognised Special Waste disposal scheme.

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## 14. TRANSPORT INFORMATION

Proper Shipping Name:

Corrosive liquid, flammable, N.O.S. (potassium hydroxide, ethanol)

UN Number: 2920

Class: 8 (Corrosive)

Subsidiary class: 3 (Flammable)

Packing group: II

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## 15. REGULATORY INFORMATION

Classification and Symbol –  
CORROSIVE (C); HIGHLY FLAMMABLE (F)

Risk phrases –

R11 Highly Flammable.

R35 – Causes severe burns.

Safety phrases –

S7 – Keep container tightly closed.

S9 – Keep container in a well-ventilated place.

S16 – Keep away from sources of ignition. No smoking.

S26 – In cases of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S33 – Take precautionary measures against static discharges.

S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection.

S45 – In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

Regulated in the UK under the Dangerous Substances & Explosive Atmospheres Regulations 2002.

Workplace Exposure Limits:

Long term exposure limit (8 hour TWA reference period) 1920mg/m<sup>3</sup>, 1000ppm. (Ethanol)

Short term exposure limit (15 minute) 2mg.m<sup>3</sup> (Potassium Hydroxide)

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## 16. OTHER INFORMATION

Only to be used as intended by trained personnel.

Contains 10% Potassium Hydroxide

This safety data sheet in no way constitutes the user's assessment of workplace risk as required by health and safety legislation.

**Date of last revision:**

11<sup>th</sup> December 2008

For enquiries and/or orders concerning Scenesafe® kits please contact the Scenesafe® Business Unit

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