

MATERIAL SAFETY DATA SHEET

FRY'S ETCHING SOLUTION

1. IDENTIFICATION OF PRODUCT AND SUPPLIER

Product Name: Fry's Etching Solution
Supplier: Scenesafe[®] Business Unit
2920 Trident Court
Solihull Parkway
Birmingham Business Park
BIRMINGHAM
B37 7YN
Tel: 0870 609 2385

2. COMPOSITION

Ethanol (19%) F
Concentrated hydrochloric acid (16%) Xi
Copper (II) chloride-2-hydrate (6%) Xn, N
Distilled water

3. HAZARDS IDENTIFICATION

F: R11 Highly Flammable
Xn: Harmful R21/R22 – Harmful in contact with skin and if swallowed
Xi: Irritant R36/37/38 Irritating to the eyes, respiratory system and skin
N: Dangerous for the environment R50 Very toxic to aquatic organisms R53 May cause long-term adverse effects in the aquatic environment

4. FIRST AID MEASURES

Skin contact – In the case of skin contact, wash the splashed surface with large quantities of running water. Remove contaminated clothing and wash before re-use.

Eye contact – If the substance has entered the eyes, wash out with running water 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 180mls, every 10 minutes to dilute it in the stomach. *Obtain medical attention.*

Inhalation – Remove casualty to fresh air. Loosen clothing. Keep warm and rest. *Obtain*

medical attention if respiratory distress continues.

5. FIRE FIGHTING MEASURES

Special exposure – Material is not combustible. If involved in a fire it decomposes to emit toxic fumes of chlorine. Use breathing apparatus for dealing with fire.

Extinguishing media – Use extinguishing media appropriate to the surrounding fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Personal protection – Wear eye protection, gloves and protective clothing.

Spillages – Shut off all sources of ignition. Instruct others to keep at a safe distance. Spread soda ash (anhydrous sodium carbonate) liberally over the spillage if available. Dispose of as special waste via licensed waste carrier.

Clean-up procedures – Wash the spillage site with large amounts of water.

7. HANDLING AND STORAGE

Handling precautions – Wear eye protection, gloves and protective clothing.

Storage precautions – Store in a cool, well ventilated area, out of direct sunlight. Keep away from bases.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Personal protection – Wear eye protection, gloves and protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Acidic, green liquid completely miscible with water.

10. STABILITY AND REACTIVITY

Chemical stability – Shelf life 1 year.

Conditions to avoid – Store in a cool, well ventilated area, out of direct sunlight. Keep away from bases.

11. TOXICOLOGICAL INFORMATION

Moderate toxicity

After skin exposure – Irritation and redness at site of exposure. Burns may occur.

After eye contact – Severe irritation, pain and redness. Corneal burns may occur.

After ingestion – Mild poisoning causes vomiting (blood may be present), nausea, burning in the throat and diarrhoea. Severe poisoning can result in convulsions and kidney/liver damage.

After inhalation – Irritation to respiratory tract. Symptoms caused by Copper II Chloride may not appear for two to three hours when there may be shortness of breath, coughing, muscle aching and a slight fever, which usually settles after 24 hours

12. ECOLOGICAL INFORMATION

Contains a severe marine pollutant. Special shipping regulations apply.

Very toxic to aquatic organisms

May cause long-term adverse effects in the aquatic environment

Acute toxicity:

96hr LC50 (fish): < 1mg/l

48hr EC50 (daphnia): < 1mg/l

72hr IC50 (algae): < 1mg/l

Substance is not readily degradable.

13. DISPOSAL CONSIDERATIONS

Waste disposal – Dispose of via a Specialist Disposal Company.

14. TRANSPORT INFORMATION

FLAMMABLE LIQUID, N.O.S. (Ethanol)

UN No. 1993

Class: 3

Subsidiary class:

Packing group : II

Marine Pollutant

15. REGULATORY INFORMATION

Classification and Symbol –

CORROSIVE (C)

HIGHLY FLAMMABLE (F)

HARMFUL (Xn)

IRRITANT (Xi)

Risk Phrases –

R11 Highly Flammable

R21/R22 – Harmful in contact with skin and if swallowed.

R36/R37/R38 – Irritating to eyes, respiratory system and skin.

Safety Phrases -

S9 Keep in a well ventilated place

S16 Keep away from sources of ignition

S24 – Avoid contact with skin.

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

S33 - Take precautionary measures against static discharge

S36/S37/S39 – Wear suitable protective clothing, gloves and eye/face protection.

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

Workplace Exposure Limits for Hydrogen Chloride: - Short term exposure (15 minute reference period) 8mg/m³ (5ppm)

16. OTHER INFORMATION

Only to be used as intended by trained personnel.

Can generate harmful fumes when applied to metals

This safety data sheet in no way constitutes the users own assessment of workplace risk as required by health and safety legislation

Date of Last Revision: 05th September 2006

For enquiries and/or orders concerning Scenesafe® kits please contact the Scenesafe® Business Unit Tel: 0870 609 2385 Fax: 0121 329 5241 Email: scenesafe@fss.pnn.police.uk
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