

SDS Reference
Version No. 3
Revision Date 13/08/2015
Origination Date 11/10/2012

Safety Data Sheet

REVISION



Product Name ME11

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND COMPANY

Product Name ME11
Synonym (s) -
Product Use/s ELECTROCHEMICAL MARKING SOLUTION
Company Identification Universal Marking Systems Ltd
Unit 4, Dukess Mill
Station Approach Telephone 01420 565 800
Medstead, GU34 5EN
Emergency Telephone 01420 565 800
e-mail address info@ums.co.uk

2. HAZARDS IDENTIFICATION

Classification of mixture (Regulation (EC) No. 1272/2008 (CLP))

Not classified

Label elements

Hazard pictogram(s) None

Signal word None

Hazard statements None

Precautionary statements None

Further information None

Other hazards This product is low hazard but may cause slight irritation of the skin and eyes.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS-No	EINECS/ELINCS	Classification (Reg. EC1272/2008)	Conc. %
D, L-malic acid	617-48-1	210-514-9	Skin Irrit. 2; H315 Eye Irrit. 2; H319	< 3
Citric acid	77-92-9	201-069-1	Eye Irrit. 2; H319	< 2

Further Information: Other components are either low hazard or are below the concentration limit for classification.

4. FIRST AID MEASURES

Inhalation If inhaled, provide fresh air, warmth and rest.

Skin contact Clean areas of skin affected with soap and plenty of water.

Eye contact In case of contact with eyes, rinse immediately with plenty of water until irritation subsides.

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4. FIRST AID MEASURES

Ingestion Allow the patient to vomit on his own accord. DO NOT induce vomiting. Give copious water to drink and if necessary seek medical advice.

Further information -

5. FIRE FIGHTING MEASURES

General hazard THE PRODUCT IS NON-COMBUSTIBLE

Extinguishing media To suit local surroundings (e.g. water spray, carbon dioxide, foam, chemical powder)

Extinguishing media not to be used -

Special exposure hazards Decomposition products released in a fire, (e.g. oxides of nitrogen), should be considered toxic if inhaled.

Protective equipment Fire fighters should wear protective equipment appropriate for surrounding fire.

Further information -

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up LARGE LEAKS & SPILLAGES: Adhere to personal protective measures. Take up with absorbent material, e.g. sand, sawdust, into tightly closable containers. Label container and dispose of as prescribed.
MINOR LEAKS & SPILLAGES: Wear protective gloves and mop up with a cloth. Wash contaminated area with plenty of water.

Environmental considerations Do not allow large volumes to get into waste water or waterways; if this occurs, inform the relevant water authority at once.

Further information Wash decontaminated area well with plenty of water.

7. HANDLING & STORAGE

Advice on safe handling Handle in accordance with good hygiene and safety practice. Wear appropriate protective clothing as specified in section 8.

Storage conditions Ensure adequate ventilation of the storage area. Keep containers tightly closed, cool and dry when not in use.

Further information No special precautions are required.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit values No Workplace Exposure Limits (WEL) assigned.

LTEL (8 hour TWA): - ppm - mg/m³

STEL (15min) - ppm - mg/m³

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering controls	Ensure adequate ventilation of working area.
Personal protection	Observe normal standards for handling chemicals. Wash hands before breaks and after work. Wear personal protective equipment appropriate to the task (see below).
Eye protection	Safety spectacles.
Skin protection	Lightweight chemical resistant gloves.
Respiratory protection	Not required.
Other personal protection	Not required.
Environmental exposure controls	No significant issues.
Further Information	Personal protective equipment should be selected as appropriate for the identified hazard(s). It should be regularly inspected for soundness against leaks, bad fitting and possible chemical penetration. Recommended safe use periods should never be exceeded.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical form	Liquid supplied in 1 litre and 125 ml plastic bottles.
Colour	Clear
Odour	Mild
Molecular weight	Not applicable
Molecular formula	Not applicable
pH	Slightly acidic.
Boiling pt / range	100°C approx.
Melting pt / range	Not available
General Flammability	Non-combustible
Flash point	Non-combustible
Auto-ignition temperature	Non-combustible
Decomposition temperature	Not available
Relative Density	Approx. 1
Explosive properties	Not explosive
Oxidising properties	Not oxidising
Vapour pressure	Not available
Vapour Density	Not available
Relative Evaporation Rate (n-Butyl Acetate = 1)	Not available

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9. PHYSICAL & CHEMICAL PROPERTIES

Viscosity Not available
Water solubility Miscible
Partition coefficient (log P or log K n-octanol / water) Not available
Additional information -

10. STABILITY & REACTIVITY

Stability Stable under normal conditions.
Conditions to avoid None.
Incompatible Materials No specific incompatibilities.
Hazardous decomposition products May generate toxic fumes if involved in a fire.
Further information -

11. TOXICOLOGICAL INFORMATION

Acute toxicity LD₅₀ rat (oral) 3000 mg/kg data for Citric acid RTECS GE7350000
Acute irritation/corrosivity Skin (rabbit): 500 mg/24H – MILD data for Citric acid
Eye (rabbit): 0.75 mg/24H - SEVERE data for Citric acid
Sensitisation -
Repeated dose toxicity -
CMR effects -
Further information No significant toxicological data as this is a low hazard product.

12. ECOLOGICAL INFORMATION

Ecotoxicity LC₅₀ fish 440 – 760 mg/l/96H data for Citric acid
EC₅₀ Daphnia magna ca. 120 mg/l/72H data for Citric acid
Mobility Miscible with water.
Persistence and degradability Product is not persistent and will degrade safely.
Bioaccumulative potential Low.
Results of PBT assessment No data available.
Other adverse effects This product is low hazard and unlikely to cause environmental damage.

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13. DISPOSAL CONSIDERATIONS

Advice on disposal In accordance with national (i.e. Hazardous Waste Regulations in the UK) and local authority regulations, e.g. incineration.

Contaminated packaging Treat empty containers in the same way as the product or if possible wash out thoroughly and recycle.

Further information In the UK, this product and its containers can be disposed of as normal industrial waste.

14. TRANSPORT INFORMATION

United Nations number The product is not classified for transport

Proper shipping name -

Class -

Subsidiary risk/s -

Packing group -

Marine pollutant -

Emergency action code -

Hazard Identification Number -

Further information -

15. REGULATORY INFORMATION

Classification & labelling in accordance with EC Regulation No. 1272/2008

16. OTHER INFORMATION

Key H statements in Section 3 H315 Causes skin irritation.
H319 Causes serious eye irritation.

Sources of data RTECS; suppliers' safety data sheets; ECHA Classification & Labelling Inventory.

Date of revision 13/08/15

Reason for revision Amended information and advice to improve relevance for end users.

Sections revised 5, 6, 7, 8, 9, 16.

This information is based on our present state of knowledge and is intended to describe our products from the point of view of the safety requirements. It should not be construed as guaranteeing specific properties.

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