

Safety Data Sheet

According to Regulation (EU) 2015/830



SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1	Product Name	MA1
1.2	Relevant identified uses of the substance	Marking solution
1.3	Details of the supplier	Universal Marking Systems Ltd Dukes Mill, Station Approach, Medstead, Alton, Hants, GU34 5BP, England
	Telephone	+44 (0) 1420 565800
	Email	Info@ums.co.uk
	Web	www.ums.co.uk
1.4	Emergency Telephone Number	+44(0) 1420 565800

SECTION 2: HAZARDS IDENTIFICATION

2.1	Classification of the substance or mixture	
	Classification of mixture	EC 1272/2008 (CLP)
	Physical hazards	None
	Health hazards	None
	Environmental Hazards	None
2.2	Label Elements	
	Hazard pictograms	None
	Signal Word	None
	Hazard statement	None
	Precautionary statements	None
	Contains	
2.3	Other Hazards	This product is low hazard but may cause slight skin and eye irritation

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1	Substances	Not applicable
3.2	Mixtures	
	Name of Ingredient	Ammonium nitrate
	CAS No	6484-52-2
	Approx. content	<20%
	M-Factor	-
	Classification	Ox. Sol. 3; H272
	Name of Ingredient	Citric Acid
	CAS No	77-92-9
	Approx. content	<5%
	M-Factor	-
	Classification	Eye Irrit 2; H319

Safety Data Sheet

According to Regulation (EU) 2015/830



SECTION 4: FIRST AID MEASURES

4.1	Description of First Aid Measures	
	General information	-
	Inhalation	If inhaled, provide fresh air, warmth and rest. If necessary, seek medical advice.
	Ingestion	If product is swallowed, DO NOT induce vomiting. Rinse mouth, give copious water to drink and seek medical advice. Show product label or this safety data sheet.
	Eye contact	In case of contact with eyes, rinse immediately with plenty of water until irritation subsides.
	Skin contact	Clean areas of skin affected with soap and plenty of water
4.2	Most important symptoms & side effects	
	General information	-
	Inhalation	No specific symptoms
	Ingestion	No specific symptoms
	Skin contact	May cause slight irritation
	Eye contact	May cause slight irritation
4.3	Indication of any immediate medical attention and special treatment needed	
	Notes for the doctor	Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

5.1	Suitable extinguishing media	To suit local surroundings (e.g. water spray, carbon dioxide, foam, chemical powder)
5.2	Special hazards arising from the mixture	
	Specific hazards	Decomposition products released in a fire, (e.g. oxides of nitrogen), should be considered toxic if inhaled
	Hazardous combustion products	This product is non-combustible
5.3	Advice for firefighters	
	Protective actions during firefighting	No specific actions.
	Special protective equipment for firefighters	Fire fighters should wear protective equipment appropriate for surrounding fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1	Personal precautions, protective equipment and emergency procedures	Avoid contact with skin and eyes. Wear suitable personal protective equipment (see section 8).
6.2	Environmental precautions	Do not allow large volumes to get into waste water or waterways; if this occurs, inform the relevant water authority at once.
6.3	Methods and material for containment and cleaning up	LARGE LEAKS & SPILLAGES: Adhere to personal protective measures. Take up with material, e.g. sand, into tightly closable containers. DO NOT use organic absorbent material. Label container and dispose of as hazardous waste. MINOR LEAKS & SPILLAGES: Wear protective gloves and absorb spillage

Safety Data Sheet

According to Regulation (EU) 2015/830






		into a damp cloth. Ensure cloth is fully rinsed out afterwards. Wash contaminated area with plenty of water.
6.4	Reference to other sections	See Section 8 for personal protective equipment. See Section 13 for waste disposal.

SECTION 7: HANDLING AND STORAGE

7.1	Precautions for safe handling	
	Usage precautions	Handle in accordance with good hygiene and safety practice. Wear suitable protective clothing as specified in section 8. Avoid contact with organic or combustible materials. CAUTION: This includes wood, paper and rags. If these become contaminated and are allowed to dry out, they may spontaneously catch fire.
7.2	Conditions for safe storage, including any incompatibilities	
	Storage precautions	Ensure adequate ventilation of the storage area. Keep containers tightly closed, cool and dry when not in use.
	Storage Class	12
7.3	Specific end use(s)	
	Usage description	Marking solution.



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTIONS

8.1	Control Parameters	
	Occupational exposure limits	No Workplace Exposure Limits (WEL) assigned.
8.2	Exposure controls	
	Appropriate engineering controls	Ensure adequate ventilation of working area.
	Individual protection measures	Observe normal standards for handling chemicals. Wash thoroughly after handling (shower if necessary). Store work clothes separately. Do not eat, drink or smoke in the working area. Wear personal protective equipment appropriate to the task (see below). 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.
		Not required
		Lightweight chemical resistant gloves for normal use. PVC gloves for dealing with large leaks or spillages.
		None required for normal use. Protective overalls for dealing with large leaks or spillages.

Safety Data Sheet

According to Regulation (EU) 2015/830



		Not required.
		Safety glasses.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information on basic physical and chemical properties (typical data)	
	Appearance	Liquid supplied in 1 litre and 125 ml plastic bottles
	Colour	Not available
	Odour	Not available
	Odour threshold	Not available
	pH	Approx 2.5
	Melting point	Not available
	Initial boiling point and range	100°C approx.
	Flash point	Not flammable
	Evaporation rate	Not available
	Evaporation factor	Not available
	Upper/lower flammability or explosive limits	Not flammable
	Vapour pressure	Not available
	Vapour density	Not available
	Relative density	Approx. 1
	Bulk density	Not applicable
	Solubility(ies)	Miscible with water
	Partition coefficient	Not available
	Auto-ignition temperature	Not flammable
	Decomposition temperature	Not available
	Viscosity	Not available

SECTION 10: STABILITY AND REACTIVITY

10.1	Reactivity	Stable under normal use and storage conditions.
10.2	Chemical stability	The product may oxidise slowly in air.
10.3	Possibility of hazardous reactions	May react with reducing agents and alkalis.
10.4	Conditions to avoid	Combustible materials, alkalis and organic substances. Avoid contact with wood, paper and rags.
10.5	Incompatible materials	Strong reducing agents and alkalis.
10.6	Hazardous decomposition product(s)	May generate toxic fumes if involved in a fire.

Safety Data Sheet

According to Regulation (EU) 2015/830



SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on toxicological effects	
	Toxicological effects	The product is low hazard.
	Acute toxicity	LD50 rat (oral): 2217 mg/kg - data for Ammonium nitrate RTECS BR9050000 LD50 rat (oral): 3000mg/kg - data for Citric Acid RTECS GE7350000
	Skin corrosion/irritation	Skin (rabbit): 500mg/24h – mild - data for Citric acid
	Serious eye damage/irritation	Eye (rabbit): 0.75mg/24h – severe - data for Citric acid
	Respiratory sensitisation	Not sensitising
	Inhalation	No significant hazard.
	Ingestion	No significant hazard.
	Skin contact	May cause slight irritation.
	Eye contact	May cause slight irritation.

SECTION 12: ECOLOGICAL INFORMATION

12.1	Ecotoxicity	This product is unlikely to be dangerous for the environment.
12.2	Toxicity	LC50 fish: 440-760mg/l/96h - data for Citric acid EC50 Daphnia magna: ca. 120mg/l/72h - data for Citric acid LC50 fish: 5657mg/l/96h - data for Ammonium nitrate
12.3	Persistence and degradability	No data available
12.4	Mobility in soil	No Data available
12.5	Results of PBT and vPvB assessment	No data available
12.6	Other adverse effects	None

SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	
	General information	In accordance with national (i.e. Hazardous Waste Regulations in the UK) and local authority regulations, e.g. incineration. Treat empty containers in the same way as the product or if possible wash out thoroughly and recycle.
	Disposal methods	In the UK, product and contaminated packaging can be disposed of as normal industrial waste.

Safety Data Sheet

According to Regulation (EU) 2015/830



SECTION 14: TRANSPORT INFORMATION

14.1	UN Number	The product is not hazardous for transport
14.2	UN proper shipping name	-
14.3	Transport hazard classes	-
14.4	Packing group	-
14.5	Environmental hazards	-
14.6	Special Precautions for user	-
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not intended to be transported in bulk.

SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	
	National regulations	Ensure compliance with all relevant national regulations.
	EU legislation	In accordance with EC Regulation No. 1272/2008
	Guidance	Ensure compliance with all relevant guidance.
	German Water Hazard Class (WGK)	1
15.2	Chemical safety assessment	Not applicable.

SECTION 16: OTHER INFORMATION

16.1	General Information	RTECS; suppliers' safety data sheets; ECHA Classification & Labelling Inventory
16.2	Hazard statements in full	H272 May intensify fire; oxidiser H319 Causes serious eye irritation

Disclaimers

Information contained in this publication or as otherwise supplied to users is believed to be accurate and is given in good faith, but it is for the users to satisfy themselves of the suitability of the products for their own particular purpose. Universal Marking Systems gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Universal Marking Systems accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.