

# Safety Data Sheet


According to Regulation (EU) 2015/830



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

1.1	<b>Product Name</b>	MA2
1.2	<b>Relevant identified uses of the substance</b>	Marking solution
1.3	<b>Details of the supplier</b>	Universal Marking Systems Ltd Dukes Mill, Station Approach, Medstead, Alton, Hants, GU34 5BP, England
	Telephone	+44 (0) 1420 565800
	Email	<a href="mailto:Info@ums.co.uk">Info@ums.co.uk</a>
	Web	<a href="http://www.ums.co.uk">www.ums.co.uk</a>
1.4	<b>Emergency Telephone Number</b>	+44(0) 1420 565800

## SECTION 2: HAZARDS IDENTIFICATION

2.1	<b>Classification of the substance or mixture</b>	
	Classification of mixture	EC 1272/2008 (CLP)
	Physical hazards	None
	Health hazards	Eye Damage 1; H318
	Environmental Hazards	None
2.2	<b>Label Elements</b>	
	Hazard pictograms	
	Signal Word	Danger
	Hazard statement	H318: Causes serious eye damage.
	Precautionary statements	P280: Wear protective gloves/protective clothing/eye protection/face protection. P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310: Immediately call a doctor/physician.
	Contains	Calcium nitrate tetrahydrate & Citric acid anhydrous
2.3	<b>Other Hazards</b>	None

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1	<b>Substances</b>	
3.2	<b>Mixtures</b>	
	Name of Ingredient	Calcium nitrate tetrahydrate
	CAS No	13477-34-4
	Approx. content	< 20%
	M-Factor	-
	Classification	Eye Damage 1; H318 Acute Toxicity 4; H302
	Name of ingredient	Citric acid anhydrous
	CAS No	77-92-9
	Approx. content	< 5%

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M-Factor	-
Classification	Eye Irritant 2; H319

## SECTION 4: FIRST AID MEASURES

<b>4.1</b>	<b>Description of First Aid Measures</b>	
	General information	None.
	Inhalation	Move affected person to fresh air.
	Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Do not induce vomiting.
	Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
	Skin contact	Wash with plenty of soap and water.
<b>4.2</b>	<b>Most important symptoms &amp; side effects</b>	
	General information	None.
	Inhalation	No specific symptoms.
	Ingestion	Ingestion of large volumes may cause stomach pain and/or vomiting.
	Skin contact	May cause slight irritation.
	Eye contact	Causes serious eye damage. Severe irritation, burning and tearing.
<b>4.3</b>	<b>Indication of any immediate medical attention and special treatment needed</b>	
	Notes for the doctor	No specific recommendations. Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

<b>5.1</b>	<b>Suitable extinguishing media</b>	To suit local surroundings (e.g. water spray, carbon dioxide, foam, chemical powder)
<b>5.2</b>	<b>Special hazards arising from the mixture</b>	
	Specific hazards	Decomposition products released in a fire, (e.g. oxides of nitrogen and carbon), should be considered toxic if inhaled.
	Hazardous combustion products	This product is non-combustible.
<b>5.3</b>	<b>Advice for firefighters</b>	
	Protective actions during firefighting	As appropriate for surrounding fire.
	Special protective equipment for firefighters	Fire fighters should wear protective equipment appropriate for surrounding fire.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

<b>6.1</b>	<b>Personal precautions, protective equipment and emergency procedures</b>	Avoid contact with skin and eyes. Wear suitable personal protective equipment (see section 8).
<b>6.2</b>	<b>Environmental precautions</b>	Do not allow large volumes to get into waste water or waterways; if this occurs, inform the relevant water authority at once.
<b>6.3</b>	<b>Methods and material for containment and cleaning up</b>	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

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		hazardous waste. MINOR LEAKS & SPILLAGES: Wear protective gloves and absorb spillage into a damp cloth. Ensure cloth is fully rinsed out afterwards. Wash contaminated area with plenty of water.
6.4	<b>Reference to other sections</b>	See Section 8 for personal protective equipment. See Section 13 for waste disposal.

## SECTION 7: HANDLING AND STORAGE

7.1	<b>Precautions for safe handling</b>	
	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	<b>Conditions for safe storage, including any incompatibilities</b>	
	Storage precautions	Ensure adequate ventilation of the storage area. Keep containers tightly closed, cool and dry when not in use.
	Storage Class	8B
7.3	<b>Specific end use(s)</b>	
	Usage description	Marking solution.




## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTIONS

8.1	<b>Control Parameters</b>	
	Occupational exposure limits	No Workplace Exposure Limits (WEL) assigned.
8.2	<b>Exposure controls</b>	
	Appropriate engineering controls	Ensure adequate ventilation of working area. Provide local exhaust ventilation if necessary.
	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. Ensure the availability of eyewash bottles/stations.
		Not required
		Lightweight chemical resistant gloves for normal use. PVC gloves for dealing with large leaks or spillages.

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	None required for normal use. Protective overalls for dealing with large leaks or spillages.
	Not required.
	Goggles or safety glasses with side shields.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	<b>Information on basic physical and chemical properties (typical data)</b>	
	Appearance	Liquid supplied in 1 litre and 125 ml plastic bottles.
	Colour	Colourless.
	Odour	Mild.
	Odour threshold	Not available.
	pH	Approx. 1.2
	Melting point	Not available.
	Initial boiling point and range	Not available.
	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	Not available.
	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.
	Oxidising properties	Mildly oxidising.

## SECTION 10: STABILITY AND REACTIVITY

10.1	<b>Reactivity</b>	Stable under normal use and storage conditions.
10.2	<b>Chemical stability</b>	The product may oxidise slowly in air.
10.3	<b>Possibility of hazardous reactions</b>	May react with organic or combustible materials.
10.4	<b>Conditions to avoid</b>	Elevated temperatures.
10.5	<b>Incompatible materials</b>	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
10.6	<b>Hazardous decomposition product(s)</b>	May generate toxic oxides of carbon and nitrogen if involved in a fire.

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## SECTION 11: TOXICOLOGICAL INFORMATION

11.1	<b>Information on toxicological effects</b>	
	Toxicological effects	Product is low toxicity.
	Acute toxicity	Low acute toxicity.
	Skin corrosion/irritation	May cause slight skin irritation.
	Serious eye damage/irritation	Causes serious eye damage.
	Respiratory sensitisation	Not a respiratory sensitiser.
	Inhalation	Low hazard.
	Ingestion	Ingestion of large volumes may cause stomach pain and/or vomiting.
	Skin contact	Low hazard.
	Eye contact	Causes serious eye damage.

## SECTION 12: ECOLOGICAL INFORMATION

12.1	<b>Ecotoxicity</b>	Product is low hazard for the environment.
12.2	<b>Toxicity</b>	Not considered toxic to fish.
12.3	<b>Persistence and degradability</b>	Not available.
12.4	<b>Mobility in soil</b>	Product is soluble in water.
12.5	<b>Results of PBT and vPvB assessment</b>	Product not classified as PBT or vPvB according to EU criteria.
12.6	<b>Other adverse effects</b>	None

## SECTION 13: DISPOSAL CONSIDERATIONS

13.1	<b>Waste treatment methods</b>	
	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 must be disposed of as Hazardous Waste.

## SECTION 14: TRANSPORT INFORMATION

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

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## SECTION 15: REGULATORY INFORMATION

15.1	<b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
	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	<b>Chemical safety assessment</b>	Not applicable.

## SECTION 16: OTHER INFORMATION

16.1	<b>General Information</b>	Suppliers' safety data sheets for components. ECHA Classification & Labelling Inventory
16.2	<b>Hazard statements in full</b>	H302: Harmful if swallowed. H318: Causes serious eye damage. H319: Causes serious eye irritation.

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