

SDS Reference UN4405
Version No. 4
Revision Date 16/09/2009
Origination Date 21/01/2005

Safety Data Sheet

REVISION



Product Name ME 20

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND COMPANY

Product Name ME 20
Synonym (s) -
REACH Registration Number Not available
Product Use/s MARKING
Company Identification Universal Marking Systems Ltd
Mount Road
Feltham Telephone 0208 898 4884
Middlesex
Emergency Telephone 01354 653222
e-mail address info@ums.co.uk

2. HAZARDS IDENTIFICATION



IRRITANT

Physical & Chemical: -
Health: IRRITATING TO THE EYES, RESPIRATORY SYSTEM AND SKIN
Environmental: -
Further Information: -

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical name</u>	<u>CAS-No</u>	<u>EINECS/ELINCS</u>	<u>REACH Reg No</u>	<u>Classification</u>	<u>Concentration %</u>
Citric acid	77-92-9	201-069-1	-	Xi: R37/38, R41	5-10
Ammonium sulphate	7783-20-2	231-984-1	-	Xi: R36/37/38	10-15
* Formaldehyde	50-00-0	200-001-8	-	T: R23/24/25 C: R34 Carc Cat 3: R40 Xi: R43	<0.2
Water	7732-18-5	231-791-2	-	-	>50

Other components are either not classified or are below the concentration limit for classification.

Further Information: * CONTAINS A SUBSTANCE WITH A WORKPLACE EXPOSURE LIMIT (WEL).

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4. FIRST AID MEASURES

General information -

Inhalation If inhaled, provide fresh air, warmth and rest. If necessary seek medical advice.

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.

Ingestion Allow the patient to vomit on his own accord. 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 Wear self-contained breathing apparatus and a chemical resistant suit.

Further information -

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up 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.

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

Further information -

7. HANDLING & STORAGE

Advice on safe handling Handle in accordance with good hygiene and safety practice.

Storage conditions Ensure adequate ventilation of the storage area. Keep containers tightly closed, cool and dry.

Further information -

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit values	Monitoring of the workplace should be considered in accordance with Community Exposure Limits (EH40 etc.) or other data as indicated below: LTEL (8 hour TWA): 2 ppm 2.5 mg/m ³ WEL data for formaldehyde EH40 (2005) STEL (15min) 2 ppm 2.5 mg/m ³ WEL data for formaldehyde EH40 (2005)
Engineering controls	Ensure adequate ventilation of working area.
Personal protection	Observe normal standards for handling chemicals. Avoid eye and skin contact. Wash hands before breaks and after work. Wear personal protective equipment appropriate to the task (see below).
Eye protection	Safety goggles.
Skin protection	PVC gloves.
Respiratory protection	Respirator or air fed visor (if ventilation is insufficient).
Other personal protection	Protective overalls.
Environmental exposure controls	Data not supplied.
Further Information	Personal protective equipment should be selected as appropriate to the nature and aggressiveness of the identified hazard(s). It should be regularly inspected for such things as soundness against leaks, bad fitting and possible chemical penetration. Recommended safe user periods should never be exceeded.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical form	Liquid
Colour	Not available
Odour	Not available
Molecular weight	Not applicable
Molecular formula	Not applicable
pH	Approx. 2.5
Boiling pt / range	Not available
Melting pt / range	Not available
General Flammability	NON-COMBUSTIBLE
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
Relative Density	Not available

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9. PHYSICAL & CHEMICAL PROPERTIES

Explosive properties Not available
Oxidising properties Not available
Vapour pressure Not available
Vapour Density Not available
Relative Evaporation Rate (n-Butyl Acetate = 1) Not available
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 of handling.
Conditions to avoid Data not supplied.
Incompatible Materials Strong alkalis.
Hazardous decomposition products Data not supplied.
Further information -

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD ₅₀ rat (oral)	3000 mg/kg	data for citric acid RTECS GE7350000
LD ₅₀ rat (oral)	2840 mg/kg	data for ammonium sulphate RTECS BS4500000
LD ₅₀ rat (oral)	100 mg/kg	data for formaldehyde RTECS LP8925000
LC ₅₀ rat (inhalation)	578 mg/m ³ /2H	data for formaldehyde RTECS LP8925000
LD ₅₀ rabbit (skin)	270 mg/kg	data for formaldehyde RTECS LP8925000

Acute irritation/corrosivity

Skin (rabbit): 500mg/24H - MILD	data for citric acid
Eye (rabbit): 0.75mg/24H - SEVERE	data for citric acid
Skin (rabbit): 2mg/24H - SEVERE	data for formaldehyde
Eye (rabbit): 0.75 mg/24H - SEVERE	data for formaldehyde

Sensitisation No data available.
Repeated dose toxicity No data available.
CMR effects CMR data available for formaldehyde, RTECS LP8925000
Further information Consideration should be given to section 15 of this safety data sheet, noting any identified hazards for this product and route of entry whereby harm could be caused to body tissues and organs.

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12. ECOLOGICAL INFORMATION

Ecotoxicity	EC ₅₀ daphnia magna	423 mg/l/48H	data for ammonium sulphate.
	LC ₅₀ fish	310 mg/l/96H	data for ammonium sulphate.
	LC ₅₀ fish	>440 – 760 mg/l/96H	data for citric acid.
	EC ₅₀ daphnia magna	Approx. 120 mg/l/72H	data for citric acid.
	LC ₅₀ fish	96 - 7200 mg/l/96H	data for formaldehyde.
	EC ₅₀ daphnia magna	2 mg/l/48H	data for formaldehyde.
	IC ₅₀ algae	0.39 - 14 mg/l/72H	data for formaldehyde.
Mobility	No data available.		
Persistence and degradability	No data available.		
Bioaccumulative potential	No data available.		
Results of PBT assessment	No data available.		
Other adverse effects	Consideration should be given to any environmental or health hazards indicated in section 2, and the physical properties indicated in section 9, of this safety data sheet, in the light of any possible damage to wildlife or to the environment in land, water, air or upper atmosphere.		

13. DISPOSAL CONSIDERATIONS

Advice on disposal	In accordance with national (i.e. Hazardous Waste Regulations) 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	-

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	-

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15. REGULATORY INFORMATION

Classification & labelling The product is categorised in accordance with European Regulations.
Contains: Formaldehyde.

May produce allergic reaction.



IRRITANT

Risk phrases R36/37/38 IRRITATING TO THE EYES, RESPIRATORY SYSTEM AND SKIN

Safety phrases (S2) KEEP OUT OF REACH OF CHILDREN
S24/25 AVOID CONTACT WITH SKIN AND EYES
S26 IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE

16. OTHER INFORMATION

General summary -

Further information CAUTION - The substance has not been fully tested.

Key to R phrases R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
In Section 3 R34 Causes burns.
R36/37/38 Irritating to eyes, respiratory system and skin.
R40 Limited evidence of a carcinogenic effect.
R41 Risk of serious damage to eyes.
R43 May cause sensitisation by skin contact.

Sources of data Sigma Aldrich, RTECS and other suppliers' safety data sheets.

Date of Revision 16/09/2009

Reason for revision CLP Regulations

Sections revised 2, 12, 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.

Data sheet prepared by Environmental Science Limited.

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