



SAFETY DATA SHEET

CAFFEINE CITRATE

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY:

PRODUCT NAME:	CAFFEINE CITRATE
CHEMICAL NAME 2:	1,3,7-Trimethyl-1,2,6-tetrahydropurine, 2-hydroxy-1,2,3-propantricarboxylic acid (1:1)
PART No.:	RM293
SUPPLIER:	J M Loveridge plc Southbrook Road, Southampton Hampshire SO15 1BH Tel: 023 8022 2008 Fax: 023 8022 2117

2. COMPOSITION/INFORMATION ON INGREDIENTS:

CAS No.:	69-22-7
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3. HAZARDS IDENTIFICATION:

Harmful by inhalation and if swallowed. Risk of serious damage to eyes.

4. FIRST AID MEASURES:

GENERAL:	IN ALL CASES OF DOUBT OR WHEN SYMPTOMS PERSIST, ALWAYS SEEK MEDICAL ATTENTION
INHALATION:	Move affected person to fresh air. If recovery not rapid, seek medical attention.
INGESTION:	DO NOT INDUCE VOMITING. In case of spontaneous vomiting, be sure that vomit can freely drain because of danger of suffocation. Only when conscious, rinse mouth with plenty of water and give plenty of water to drink - (approx 500ml). Keep patient at rest and obtain medical attention.
SKIN:	Remove contaminated clothing. Wash affected area with plenty of soap and water. If irritation persists, seek medical attention. Launder clothing before re-use.
EYES:	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

5. FIRE FIGHTING MEASURES:

EXTINGUISHING MEDIA:	Water spray, foam, dry powder or carbon dioxide.
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SPECIAL FIRE FIGHTING PROCEDURES:	Take measures to retain water used for extinguishing. Do not release contaminated water into drains, soil and surface water. Dispose of contaminated water and soil according to local regulations.
UNUSUAL FIRE & EXPLOSION HAZARDS:	Finely divided material can cause dust explosion.
HAZARDOUS COMBUSTION PRODUCTS:	Burning may release oxides of carbon and other hazardous gases or vapours.
PROTECTIVE MEASURES IN FIRE:	Fire fighters should wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES:

PERSONAL PRECAUTION IN SPILL:	Avoid direct contact with skin, eyes and clothing. Wear appropriate protective clothing.
PRECAUTIONS TO PROTECT ENVIRONMENT:	Prevent contamination of soil, drains and surface water.
SPILL CLEANUP METHODS:	Cover spillage with damp inert material, take-up or collect and place into a suitable closable labelled container for disposal. Avoid dry sweeping or other methods which raise dust. Wash the area clean with water and detergent, observing environmental requirements.

7. HANDLING AND STORAGE:

USAGE PRECAUTIONS:	HANDLING - Product should be used in accordance with good industrial principles for handling and storing of hazardous chemicals. Avoid creating or raising dust. Avoid contact with skin or eyes.
STORAGE PRECAUTIONS:	Store in a cool, dry, well ventilated place, in securely closed original container.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

INGREDIENT COMMENTS:	No specific OES assigned, however for dusts of any kind, ensure LTEL (8-hour TWA ref. period) level does not exceed 10 mg.m3 for total inhalable dust or 4 mg.m3 for respirable dust (or) as recommended in current edition of EH40.
VENTILATION:	Provide adequate general and local exhaust ventilation.
RESPIRATORS:	If unable to control dust emissions below OES limits, an approved dust protection to P2 level of protection is recommended.
PROTECTIVE GLOVES:	Use impervious gloves.
EYE PROTECTION:	Wear approved chemical safety goggles where eye exposure is reasonably probable.
OTHER PROTECTION:	Use engineering controls to reduce air contamination to permissible exposure level.
HYGIENIC WORK PRACTICES:	SKIN PROTECTION - apply barrier cream to hands and exposed skin. Regularly vacuum dust to minimise the potential of air-borne exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE:	White powder.
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ODOUR/TASTE:	Odourless or no characteristic odour.		
PHYSICAL DATA COMMENTS:	Fine dust may create explosive mixture with air. Dust explosion hazard ST2.		
MELT/FREEZ. POINT (°C, interval):	mp.: 150°C		
DENSITY/SPECIFIC GRAVITY (g/ml):	Apparent density: 500 kg/m 3	Tem perature (°C):	
pH-VALUE, DILUTED SOLUTION:	3 (20% aqueous soln.)	Concentration % M:	
SOLUBILITY DESCRIPTION:	Soluble in water.		
SOLUBILITY VALUE (g/100g H2O 20°C):	95g/litre		

10. STABILITY AND REACTIVITY:

STABILITY:	Stable under normal conditions of use.
HAZARDOUS DECOMP. PRODUCTS:	Thermal decomposition or burning may release oxides of carbon and oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION:

TOXIC DOSE - LD 50:	685 mg/kg (oral rat)
HEALTH HAZARDS, GENERAL:	Irritating to eyes or if inhaled as dust.
SKIN:	No irritant effect or sensitising effect.
EYES:	Risk of serious damage to eye.

12. ECOLOGICAL INFORMATION:

ECOLOGICAL INFORMATION:	No specific information available, but material is expected to have adverse effect on the environment.
WATER HAZARD CLASSIFICATION:	Water hazard class 1.

13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHODS:	This material and/or its container must be disposed of as hazardous waste according to Special Waste Regulations 1996 or according to local regulations, in compliance with Duty of Care Regulations and Special Waste Regulations.
WASTE CLASS:	WASTE CODE: 0705** HAZARDOUS PROPERTY: H6

14. TRANSPORT INFORMATION:

GENERAL: Not classified as hazardous for transport.

15. REGULATORY INFORMATION:

LABEL FOR SUPPLY:



RISK PHRASES: R-20/22 Harmful by inhalation and if swallowed.
R-41 Risk of serious damage to eyes.

SAFETY PHRASES: S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S-39 Wear eye/face protection.
S-46 If swallowed seek medical advice immediately and show this container label.

UK REGULATORY REFERENCES: The Control of Substances Hazardous to Health Regulations 1988. Chemicals (Hazard Information & Packaging) Regulations 1993. Classification, Packaging and Labelling Regulations 1984.

16. OTHER INFORMATION:

INFORMATION SOURCES: This product has been classified in accordance with CHIP3 regulations.

REVISION COMMENTS: Edition 01; Revised item(s):

ISSUED BY: MK

SDS No.: 441

DATE: 12/07/02

DISCLAIMER: The foregoing data has been compiled for safety information only and does not form part of any selling specification. Information contained in this Data Sheet is to the best of JMLs knowledge correct at the time of publication. Customers should always satisfy themselves, that the product which they have selected is entirely suitable for their purpose under their conditions of use and in compliance with current regulations. For any further information, please contact the supplier.