



SAFETY DATA SHEET

PIPERAZINE CITRATE

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

PRODUCT NAME: PIPERAZINE CITRATE
CHEMICAL NAME 2: PIPERAZINE 2-HYDROXY-1,2,3-PROPANE-TRICARBOXYLATE (3:2)
PART No.: RM199, RM200
SUPPLIER: J M Loveridge plc
Southbrook Road, Southampton
Hampshire
SO15 1BH
Tel: 023 8022 2008
Fax: 023 8022 2117

2. COMPOSITION/INFORMATION ON INGREDIENTS:

EEC (EINECS) No. 205-622-8
CAS No.: 144-29-6

3. HAZARDS IDENTIFICATION:

Not regarded as a health hazard under current legislation.

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: Wash affected area with plenty of soap and water. If irritation persists, seek medical attention. Obtain medical attention.

EYES: Rinse immediately with copious amounts of water. If irritation or discomfort persists, seek medical attention.

5. FIRE FIGHTING MEASURES:

EXTINGUISHING MEDIA:	Foam, dry chemical or carbon dioxide.
HAZARDOUS COMBUSTION PRODUCTS:	Noxious or toxic vapours may be released in fire situation.
PROTECTIVE MEASURES IN FIRE:	Fire fighters should wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES:

PERSONAL PRECAUTION IN SPILL:	Avoid breathing dust.
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.

7. HANDLING AND STORAGE:

USAGE PRECAUTIONS:	Avoid creating or raising dust.
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.m ³ for total inhalable dust or 4 mg.m ³ for respirable dust (or) as recommended in current edition of EH40.
VENTILATION:	Ensure adequate ventilation.
RESPIRATORS:	If unable to control dust emissions below recommended limits, an approved respiratory protection (EN 149 FFP) must be used at all times providing at least P2S level of protection.
PROTECTIVE GLOVES:	Use protective gloves.
EYE PROTECTION:	Use eye protection.
OTHER PROTECTION:	Wear suitable personal protective equipment appropriate to the task.
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 crystalline powder or granules.		
MELT/FREEZ. POINT (°C, interval):	mp. 190°C		
BULK DENSITY:	650 kg/m ³		
pH-VALUE, DILUTED SOLUTION:	5 - 6	Concentration % M:	(5% aqueous solution)

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:

LD50, Oral, Rat: 11200 mg/kg

INHALATION: High concentration of dust may cause transient irritation to the upper respiratory tract.

INGESTION: Ingestion of small amounts is unlikely to cause any adverse effects.

SKIN: Reported as mild skin irritant in rabbits.

EYES: May cause transient eye irritation and discomfort.

12. ECOLOGICAL INFORMATION:

LC 50, 96 HRS, FISH mg/l: > 100

EC 50, 48 HRS, DAPHNIA, mg/l: 10 - 100

BIO ACCUMULATION: Not expected to bio-accumulate.

13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHODS: Via authorised/licenced waste disposal contractor to an approved waste disposal site, observing all local and national regulations.

14. TRANSPORT INFORMATION:

GENERAL: Not classified as hazardous for transport.

15. REGULATORY INFORMATION:

UK REGULATORY REFERENCES: This product is not classed as dangerous substance under the classification, packaging and labelling of dangerous substances regulations.

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.: 355

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.