



SAFETY DATA SHEET

FORMALDEHYDE

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

PRODUCT NAME: FORMALDEHYDE
PART No.: RM108
SUPPLIER: J M Loveridge plc
Southbrook Road, Southampton
Hampshire
SO15 1BH
Tel: 023 8022 2008
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2. COMPOSITION/INFORMATION ON INGREDIENTS:

EU INDEX No.: 605-001-00-5
EEC (EINECS) No. 200-001-8
CAS No.: 50-00-0
COMPOSITION COMMENTS: Solution containing formaldehyde @ 35% (w/w) and methanol @ 10% (w/w).

3. HAZARDS IDENTIFICATION:

Toxic by inhalation, in contact with skin and if swallowed. Causes burns. Limited evidence of a carcinogenic effect. May cause sensitisation by skin contact. Carcinogen Category 3.

4. FIRST AID MEASURES:

GENERAL: IN ALL CASES OF DOUBT OR WHEN SYMPTOMS PERSIST, ALWAYS SEEK MEDICAL ATTENTION

INHALATION: Move affected person from exposure. If recovery not rapid or complete seek medical attention. If breathing stops, provide artificial respiration. Keep affected person warm and at rest.

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. Get medical attention immediately. Continue to rinse.

5. FIRE FIGHTING MEASURES:

EXTINGUISHING MEDIA:	Water spray, fog or mist, carbon dioxide (CO ₂), alcohol resistant foam, dry chemicals, sand, dolomite etc.
SPECIAL FIRE FIGHTING PROCEDURES:	Use gentle application of water spray to keep exposed containers cool or to dissipate vapour. 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:	May explode in a fire. May form explosive or toxic mixtures with air. Vapour may travel considerable distance to source of ignition and flash back.
HAZARDOUS COMBUSTION PRODUCTS:	Thermal decomposition may release noxious, corrosive or toxic vapours.
PROTECTIVE MEASURES IN FIRE:	Fire fighters should wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES:

PERSONAL PRECAUTION IN SPILL:	Wear appropriate protective clothing. Eliminate all sources of ignition. Avoid direct contact with skin, eyes and clothing. Do not breathe vapour or fumes. Ventilate area to dispel residual vapour or fumes.
PRECAUTIONS TO PROTECT ENVIRONMENT:	Prevent material from entering drains or water courses. Advise the Environment Agency or relevant local authority if contamination of soil or water systems occurs.
SPILL CLEANUP METHODS:	Take-up spillage with absorbent, inert material and place in a suitable and closable labelled container for recovery or disposal. 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 vapour formation and ignition sources. Ensure good ventilation and local exhaust extraction in work place. (engineering controls must be to explosion/flameproof standard). Earth container and transfer equipment to eliminate accumulation of static charge.
STORAGE PRECAUTIONS:	Flammable/combustible - Keep away from oxidizers, heat and flames. Store at moderate temperatures in dry, well ventilated area. Keep containers tightly closed. Isolate from other materials.
STORAGE CRITERIA:	Toxic storage.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

INGREDIENT NAME:	CAS No.:	STD	LT EXP 8 Hrs	ST EXP 15 Min
FORMALDEHYDE	50-00-0	MEL	2 ppm	2 ppm

VENTILATION:	Use engineering controls to reduce vapour/dust emissions below MEL! Work in a fume cupboard or use local exhaust ventilation.
RESPIRATORS:	Respiratory protection required in insufficiently ventilated working areas. For short

periods of work, a suitable RPE fitted with a combination charcoal or organic vapour cartridge is recommended.

PROTECTIVE GLOVES:	Use chemically resistant impervious gloves.
EYE PROTECTION:	Wear splash-proof eye goggles to prevent any possibility of eye contact.
OTHER PROTECTION:	Avoid prolonged contact with skin. Wear protective clothing and closed footwear.
HYGIENIC WORK PRACTICES:	SKIN PROTECTION - apply barrier cream to hands and exposed skin.

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE:	Clear colourless liquid.		
ODOUR/TASTE:	Characteristic irritating, pungent.		
BOILING POINT (°C, interval):	96 - 101	Pressure:	
DENSITY/SPECIFIC GRAVITY (g/ml):	~ 1.09	Temperature (°C):	20
VAPOUR DENSITY (air=1):	1.04		
VAPOUR PRESSURE:	2.7 mmHg	Temperature (°C):	35
pH-VALUE, CONC. SOLUTION:	2.5 - 6.4		
SOLUBILITY DESCRIPTION:	Aqueous solutions are acidic. Miscible with water in all proportions.		
ODOUR THRESHOLD, LOWER:	0.80 ppm		
ODOUR THRESHOLD, UPPER:	ppm		
FLASH POINT (°C):	~ 49	Method:	
AUTO IGNITION TEMP. (°C):	430		
FLAMMABILITY LIMIT - LOWER (%):	7		
FLAMMABILITY LIMIT - UPPER (%):	73		

10. STABILITY AND REACTIVITY:

STABILITY:	Stable under normal conditions of use. However, liable to polymerise on prolonged storage and/or if in contact with reactive materials.
CONDITIONS TO AVOID:	Avoid heat, flames and other sources of ignition.
HAZARDOUS POLYMERIZATION:	Methanol added as stabilizing agent.
MATERIALS TO AVOID:	Incompatible materials: Potassium permanganate, silver nitrate, sodium bisulphite, iodine, hydrogen peroxide, ammonia, ammonium hydroxide. Oxidising agents. REACTS WITH HYDROCHLORIC ACID (vapour) TO PRODUCE CARCINOGENIC COMPOUND.
HAZARDOUS DECOMP. PRODUCTS:	Thermal decomposition may release noxious, toxic or corrosive gases or vapours.

11. TOXICOLOGICAL INFORMATION:

Toxicological data	LC50. Inhalation. Rat. 0.9 mg/kg
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LD50. Oral. Rat. 800 mg/kg (as 100% formaldehyde)

TOXICOLOGICAL INFORMATION:	Toxic by inhalation and ingestion.
INHALATION:	Irritating to the respiratory system. Irritating to mucous membranes.
INGESTION:	May cause burns to mucous membranes, throat and stomach. May cause severe systemic effects. Ingestion may prove fatal.
SKIN:	Repeated or prolonged contact may cause skin irritation and sensitisation. Repeated exposure can cause hardening and cracking of skin.
EYES:	May cause severe irritation to eyes. Repeated or prolonged exposure may cause permanent damage.
HEALTH WARNINGS:	Known or suspected carcinogen for humans. Recognized allergen.
ROUTE OF ENTRY:	Inhalation. Skin and/or eye contact.
TARGET ORGANS:	Blood. Central nervous system. Eyes. Gastro-intestinal tract. Respiratory system, lungs. Skin.
MEDICAL SYMPTOMS:	Extreme irritation of eyes and mucous membranes, including burning and tearing. General respiratory distress, unproductive cough. Severe skin irritation. Allergic rash. Nausea, vomiting. Severe abdominal pain. Dizziness.

12. ECOLOGICAL INFORMATION:

LC 50, 96 HRS, FISH mg/l:	134 mg/l (rainbow trout)
MOBILITY:	Soluble in water.
BIO ACCUMULATION:	Low bioaccumulation potential. (Log Pow = 0)
DEGRADABILITY:	Biodegradable in soil.

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; H7; H8

14. TRANSPORT INFORMATION:

UK ROAD TRANSPORT CLASS:	III
ADR CLASS No.:	3
ADR CLASS:	Class 3: Flammable liquids. - Subsidiary class 8
ADR ITEM No.:	33°(c)
HAZARD No. (ADR):	38 Flammable liquid (flash-point between 23°C and 61°C, inclusive), corrosive.

ADR MARGINAL: 2301
ADR LABEL No.: 3 + 08
HAZCHEM CODE: 2YE
PROPER SHIPPING NAME I: FORMALDEHYDE SOLUTION, FLAMMABLE
UN No. SEA: UN 1198
IMDG CLASS: 3.3
IMDG PAGE No.: 3347
IMDG PACK GR.: III
SEA TRANSPORT NOTES: Subsidiary risk label required - class 8
UN No., AIR: UN-ID 1198
ICAO CLASS: 3
AIR SUB CLASS: 8
AIR PACK GR.: III

15. REGULATORY INFORMATION:

LABEL FOR SUPPLY:



RISK PHRASES: R-23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R-34 Causes burns.
R-40 Limited evidence of a carcinogenic effect.
R-43 May cause sensitisation by skin contact.

SAFETY PHRASES: S-1/2 Keep locked up and out of the reach of children.
S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S-36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S-45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S-51 Use only in well ventilated areas.

UK REGULATORY REFERENCES: Classification, Packaging and Labelling Regulations 1984. Chemicals (Hazard Information & Packaging) Regulations 1993.

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.: 201

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.