



Gujarat State Fertilizers & Chemicals Ltd.
P.O.: Fertilizernagar, 391750, Dist. Vadodara, GUJARAT, INDIA.

PRODUCT : MELAMINE

SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER : GUJARAT STATE FERTILIZERS & CHEMICALS LIMITED
P.O.: FERTILIZER NAGAR, DIST.: VADODARA, INDIA. PIN: 391 750.
PREPARED BY : SAFETY UNIT, GSFC LTD
PREPARATION DATE : 12/05/1989. UPDATED ON 06/08/1994, 13/05/2005
PRODUCT NAME : MELAMINE
PRODUCT CODE : CAS NO. 108-78-1, NIOSH: OS 0700000, UN NO.: 8027
CHEMICAL FORMULA : C₃H₆N₆
MOLECULAR WEIGHT : 126.15
CHEMICAL FAMILY : ORGANIC CHEMICAL.
MATERIAL USE : RAW MATERIAL FOR THE MANUFACTURING OF HOUSE HOLD CROCKERY AND OTHER DOMESTIC APPLIANCES.

SECTION 02: COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENTS	EXPOSURE LEVELS	LD/50, ROUTE, SPECIES	LC/50, ROUTE, SPECIES
MELAMINE @99.8%	NA	3161 MG/KG ORAL-RAT	NA

SECTION 03: HAZARDS IDENTIFICATION

ROUTE OF ENTRY
SKIN CONTACT : IRRITANT TO SKIN.
SKIN ABSORPTION :
EYE CONTACT : IRRITANT TO EYE.
INHALATION : NUISANCE DUST CAUSES IRRITATION.
INHALATION, CHRONIC : CHRONIC INHALATION IS CARCINOGENIC.
INGESTION : MODERATELY TOXIC BY INGESTION AND INTRAPERITONIAL ROUTES.
EFFECTS OF ACUTE EXPOSURE : MODERATELY TOXIC BY INGESTION AND INTRAPERITONIAL ROUTES.
EFFECTS OF CHRONIC EXPOSURE : AN EXPERIMENTAL CARCINOGEN AND TUMORIGEN CAUSES DERMATITIS.



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SECTION 04: FIRST AID MEASURES

INSTRUCTIONS:

SKIN CONTACT	:	WASH WITH PLENTY OF WATER. FLUSH WITH SOAP AND WATER.
INHALATION	:	REMOVE INDIVIDUAL TO FRESH AIR.
INGESTION	:	GIVE LARGE AMOUNTS OF WATER TO DRINK AND OBTAIN MEDICAL ATTENTION. INDUCE VOMITING BY IPECAC SYRUP OR BY PLACING FINGER IN BACK OF THROAT.
EYE CONTACT	:	WASH WITH PLENTY OF WATER. ADMINISTER MEDICAL TREATMENT IMMEDIATELY.
NOTES TO PHYSICIAN	:	NA

SECTION 05: FIRE FIGHTING MEASURES

T.D.G. FLAM. CLASS	:	9 DOT
FLAMMABILITY	:	NO.
IF YES, UNDER WHICH CONDITIONS?	:	
EXTINGUISHING MEDIA	:	WATER, FOG FOR COOLING.
SPECIAL PROCEDURES	:	NA
FLASH POINT (C) METHOD	:	NA
AUTO IGNITION	:	
TEMPERATURE	:	NA
UPPER FLAMMABLE LIMIT (%BY VOL.)	:	NA
LOWER FLAMMABLE LIMIT (%BY VOL.)	:	NA
EXPLOSION DATA	:	
EXPLOSIVE POWER	:	NA
RATE OF BURNING	:	NA
SENSITIVITY TO STATIC DISCHARGE	:	NA
SENSITIVITY TO IMPACT	:	NA
UNUSUAL FIRE AND EXPLOSION HAZARDS	:	NA
HAZARDOUS COMBUSTION PRODUCT	:	RELEASES NO _x AND CN ⁻



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SECTION 06: ACCIDENTAL RELEASE MEASURES

LEAK/SPILL : SPILLAGES SHOULD BE COLLECTED IN BAG AND THE AREA SHOULD BE FLUSHED WITH WATER.

SECTION 07: HANDLING AND STORAGE

HANDLING PROCEDURES AND EQUIPMENT : THE MATERIAL PACKED IN BAGS ARE HANDLED ON TROLLEYS AND FORKLIFTS.
STORAGE NEEDS : MATERIAL IS STORED IN BAGS AND KEPT ON WOODEN PALLETS IN A COOL, WELL VENTILATED AREA.

SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION

GLOVES/ TYPE : USE PVC/RUBBER HANDGLOVES FOR HAND PROTECTION.
RESPIRATORY/TYPE : USE DUST RESPIRATOR, SELF-CONTAINED BREATHING APPARATUS SET.
EYE/TYPE : USE DUST TIGHT CHEMICAL GOGGLES.
FOOTWEAR/TYPE : USE PVC/RUBBER SHOES/ GUM BOOTS.
CLOTHING/TYPE : USE PVC APRON.
ENGINEERING CONTROLS : PNEUMATIC FILLING DURING BAGGING OPERATION. MECHANICAL VENTILATION, LOCAL EXHAUST VENTILATION.

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE : SOLID.
ODOUR : NA
ODOUR THRESHOLD : NA
VAPOUR PRESSURE (MM HG) : 50 MM AT 315⁰ C.
VAPOUR DENSITY (AIR = 1) : 4.34
EVAPORATION RATE : NA
BOILING POINT : SUBLIMES
PH : 7.5
SPECIFIC GRAVITY (WATER = 1) : 1.573
SOLUBILITY IN WATER (%W/W) : SLIGHTLEY SOLUBLE IN WATER. 0.4 G/100 ML AT 100⁰ C.
COEFFICIENT OF WATER/OIL DIST : NA



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SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY	:	
YES	:	YES, STABLE UNDER NORMAL CONDITIONS.
NO, WHICH	:	
CONDITION	:	
COMPATABILITY WITH	:	
OTHER SUBSTANCES	:	
YES	:	
NO, WHICH	:	
CONDITION	:	NO. REACTS WITH STRONG ACIDS.
CONDITIONS TO AVOID	:	AVOID CONTACT WITH STRONG ACIDS.
REACTIVITY CONDITIONS?	:	YES, STRONG ACIDS.
HAZARDOUS PRODUCTS OF	:	
DECOMPOSITION	:	WHEN HEATED TO DECOMPOSITION IT EMITS TOXIC FUMES OF NO _x AND CN ⁻ , CO AND CO ₂ .
HAZARDOUS POLYMERIZATION	:	
DECOMPOSITION	:	NA

SECTION 11: TOXICOLOGY INFORMATION

EXPOSURE LIMIT OF	:	
MATERIAL	:	NA
LC 50 OF MATERIAL,	:	
SPECIES & ROUTE	:	NA
LD 50 OF MATERIAL,	:	
SPECIES & ROUTE	:	3161 MG/KG (ORAL-RAT)
CARCINOGENICITY OF	:	
MATERIAL	:	AN EXPERIMENTAL CARCINOGEN AND TUMORIGEN.
REPRODUCTIVE EFFECTS	:	AS ABOVE.
IRRITANCY OF MATERIAL	:	IRRITANT TO EYE, SKIN AND MUCOUS MEMBRANE.
SENSITIZING CAPABILITY	:	
OF MATERIAL	:	NA
SYNERGISTIC MATERIALS	:	NA

SECTION 12: ECOLOGICAL CONSIDERATIONS

ENVIRONMENTAL TOXICITY	:	
INFORMATION	:	NUISANCE DUST CAUSES AIR POLLUTION. REPORTED IN EPA TSCA INVENTORY.



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SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL : NA

SECTION 14: TRANSPORT INFORMATION

UN NUMBER : 8027
T.D.G.CLASSIFICATION : 9 DOT
PACKING GROUP :
SPECIAL SHIPPING :
INSTRUCTIONS : NA

SECTION 15: REGULATORY INFORMATION

WHMIS CLASSIFICATION : NA
CPR COMPLIANCE : NA

SECTION 16: OTHER INFORMATION / DISCLAIMER

SOURCE USED : DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS
BY N. IRVING SAX.
PAMPHLET OF MELAMINE MSDS FROM MELAMINE
CHEMICALS...INC.

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