



CARCINOGENICITY.....:  
THE MATERIAL IS NOT LISTED (IARC, NTP, OSHA) AS CANCER CAUSING  
AGENT.

4. FIRST AID MEASURES

EMERGENCY FIRST AID:  
GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE.  
SKIN: WASH THOROUGHLY WITH SOAP AND WATER.  
EYES: IMMEDIATELY FLUSH THOROUGHLY WITH WATER FOR AT LEAST 15  
MINUTES.  
INHALATION: REMOVE TO FRESH AIR; GIVE ARTIFICIAL RESPIRATION IF  
BREATHING HAS STOPPED.  
INGESTION: IF CONSCIOUS, DRINK WATER AND INDUCE VOMITING  
IMMEDIATELY AS DIRECTED BY MEDICAL PERSONNEL. NEVER GIVE ANYTHING  
BY MOUTH TO AN UNCONSCIOUS PERSON.

5. FIRE FIGHTING MEASURES

FLASH POINT (F).....: N/A  
FLAMMABLE LIMITS LEL (%): N/A  
FLAMMABLE LIMITS UEL (%): N/A  
EXTINGUISHING MEDIA.....:  
USE WATER SPRAY, FOAM, DRY CHEMICAL, OR CO2.

FIRE FIGHTING PROCEDURES.:  
WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING.

FIRE & EXPLOSION HAZARDS.:  
THERMAL DECOMPOSITION PRODUCES TOXIC FUMES.

6. ACCIDENTAL RELEASE MEASURES

SPILL RESPONSE:  
EVACUATE THE AREA OF ALL UNNECESSARY PERSONNEL.  
MSDS (CONTINUED) - XX0010 PAGE # 2

WEAR SUITABLE PROTECTIVE EQUIPMENT LISTED UNDER EXPOSURE /  
PERSONAL PROTECTION.  
ELIMINATE ANY IGNITION SOURCES UNTIL THE AREA IS DETERMINED TO BE  
FREE FROM EXPLOSION OR FIRE HAZARDS.  
CONTAIN THE RELEASE AND ELIMINATE ITS SOURCE, IF THIS CAN BE DONE  
WITHOUT RISK.  
TAKE UP AND CONTAINERIZE FOR PROPER DISPOSAL AS DESCRIBED UNDER  
DISPOSAL.  
COMPLY WITH FEDERAL, STATE, AND LOCAL REGULATIONS ON REPORTING  
RELEASES. REFER TO REGULATORY INFORMATION FOR REPORTABLE  
QUANTITY AND OTHER REGULATORY DATA.

7. HANDLING AND STORAGE

HANDLING & STORAGE:  
KEEP CONTAINER TIGHTLY CLOSED.  
STORE FROZEN (-20C).  
WARM TO ROOM TEMPERATURE BEFORE OPENING.  
DO NOT BREATHE DUST OR VAPOR.  
DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT:

VENTILATION, RESPIRATORY PROTECTION, PROTECTIVE CLOTHING, EYE PROTECTION  
 MATERIAL SHOULD BE HANDLED OR TRANSFERRED IN AN APPROVED FUME  
 HOOD OR WITH ADEQUATE VENTILATION.  
 PROTECTIVE GLOVES SHOULD BE WORN TO PREVENT SKIN CONTACT  
 (NEOPRENE OR EQUIVALENT)  
 SAFETY GLASSES WITH SIDE SHIELDS SHOULD BE WORN AT ALL TIMES.

WORK / HYGENIC PRACTICES:  
 WASH THOROUGHLY AFTER HANDLING.  
 DO NOT TAKE INTERNALLY.  
 EYE WASH AND SAFETY EQUIPMENT SHOULD BE READILY AVAILABLE.

-----  
 EXPOSURE GUIDELINES

OSHA - PEL:

COMPONENT	TWA		STEL		CL		SKIN
	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	
X-GAL							

-----

MSDS (CONTINUED) - XX0010 PAGE # 3

ACGIH - TLV:

COMPONENT	TWA		STEL		CL		SKIN
	PPM	MG/M3	PPM	MG/M3	PPM	MG/M3	
X-GAL							

-----

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT (C 760 MMHG) .: N/A  
 MELTING POINT (C) . . . . .: 232-234C  
 SPECIFIC GRAVITY (H2O = 1) .: N/A  
 VAPOR PRESSURE (MM HG) . . . . .: N/A  
 PERCENT VOLATILE BY VOL (%) .: N/A  
 VAPOR DENSITY (AIR = 1) . . . . .: N/A  
 EVAPORATION RATE (BUAC = 1) .: N/A  
 SOLUBILITY IN WATER (%) . . . . .: N/A  
 APPEARANCE . . . . .:  
 WHITE POWDER

10. STABILITY AND REACTIVITY

STABILITY . . . . .: YES

HAZARDOUS POLYMERIZATION:  
 DOES NOT OCCUR

HAZARDOUS DECOMPOSITION .:  
 COX, NOX, HCL, HBR

CONDITIONS TO AVOID . . . . .:  
 HEAT

MATERIALS TO AVOID . . . . .:  
 ( ) WATER  
 ( ) ACIDS  
 ( ) BASES  
 ( ) CORROSIVES  
 (X) OXIDIZERS  
 ( ) OTHER :

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:  
NONE ESTABLISHED

TOXICOLOGICAL FINDINGS:  
NONE

CITED IN REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS)

12. DISPOSAL CONSIDERATIONS

EPA WASTE NUMBERS:  
TREATMENT:  
MATERIAL DOES NOT HAVE AN EPA WASTE NUMBER AND IS NOT A LISTED WASTE, HOWEVER CONSULTATION WITH A PERMITTED WASTE DISPOSAL SITE (TSD) SHOULD BE ACCOMPLISHED.  
ALWAYS CONTACT A PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

13. TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME...:  
NON-REGULATED

DOT ID NUMBER.....:  
NONE

14. REGULATORY INFORMATION

TSCA STATEMENT .....:  
THE CAS NUMBER OF THIS PRODUCT IS NOT LISTED ON THE TSCA INVENTORY. FOR RESEARCH AND DEVELOPMENT USE ONLY; NOT FOR MANUFACTURING OR COMMERCIAL PURPOSES.

COMPONENT	SARA EHS (302)	SARA EHS TPQ (LBS)	CERCLA RQ (LBS)
X-GAL			

COMPONENT	OSHA FLOOR LIST	SARA 313	DEMINIMIS FOR SARA 313 (%)
X-GAL			

15. OTHER INFORMATION

COMMENTS:  
MSDS (CONTINUED) - XX0010 PAGE # 5

NONE

NFPA HAZARD RATINGS:

HEALTH : 2  
FLAMMABILITY : 0  
REACTIVITY : 0  
SPECIAL HAZARDS :

REVISION HISTORY:

10/19/94 01/15/96

! = REVISED SECTION  
N/A = NOT AVAILABLE  
N/E = NONE ESTABLISHED

THE STATEMENTS CONTAINED HEREIN ARE OFFERED FOR INFORMATIONAL PURPOSES ONLY AND ARE BASED UPON TECHNICAL DATA THAT EM SCIENCE BELIEVES TO BE ACCURATE. IT IS INTENDED FOR USE ONLY BY PERSONS HAVING THE NECESSARY TECHNICAL SKILL AND AT THEIR OWN DISCRETION AND RISK. SINCE CONDITIONS AND MANNER OF USE ARE OUTSIDE OUR CONTROL, WE MAKE NO WARRANTY, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE.