

MATERIAL SAFETY DATA SHEET

For R&D use only. Not for drug, household or other uses.

Click <http://www.lookchem.com/cas-77/77-99-6.html> for suppliers of this product.

Composition/Information on Ingredient

Cas:
77-99-6

Code:
M

RTECS:

Code:
X

Name:
TRIMETHYLOLPROPANE (VP: 1 MM HG)

Other REC Limits:
NONE SPECIFIED

OSHA PEL:
N/K

Code:
M

OSHA STEL:

Code:

ACGIH TLV:
N/K

Code:
M

ACGIHSTEL:
N/P

Code:

Control Measures

Respiratory Protection:
TLV'S EXCEEDED/SPRAY MIST PRESENT: USE NIOSH/MSHA APPROVED RESPIRATORY PROTECTION APPROPRIATE FOR INDICATED COMPONENTS. CONFINED AREAS: NIOSH APPR'D AIR SUPPLIED RESPIRATORS. FOLLOW OSHA REGULATIONS (29CFR1910.134) FOR RESPIRATOR USE.

Ventilation:
GENERAL DILUTION/LOCAL EXHAUST VENTILATION IN VOLUME/PATTERN TO KEEP LEVEL OF HAZARD INGREDIENT BELOW TLV/PEL LIMITS.

Protective Gloves:
WEAR CHEMICALLY RESISTANT GLOVES

Eye Protection:
SAFETY GLASSES W/SIDESIELDS OR GOGGLES

Other Protective Equipment:
Equipment AVOID SKIN CONTACT BY USE OF OTHER PROTECTIVE CLOTHING. A SAFETY SHOWER, EYE BATH &WASHING FACILITIES.

Work Hygienic Practices:
WASH CONTAMINATED CLOTHING BEFORE REUSE. AVOID SKIN CONTACT &BREATHING VAPORS OR MIST.

Supplemental Safety and Health:
DO NOT CONCENTRATE & INHALE VAPORS. PREVENT PROLONG CONTACT W/CONTAMINATED CLOTHES. VAPORS OF THIS PRODUCT ARE HEAVIER THAN AIR & MAY COLLECT IN LOW OR CONFINED AREAS. DO NOT ENTER SUCH AREAS W/OUT FO LLOWING APPROPRIATE PROCEDURES INCLUDING AIR MONITORING, USE OF SUPPLIED AIR IF NECESSARY & AN OBSERVER FOR ASSISTANCE.

Health Hazards Data

LD50LC50Mixture:
N/K

Route Of Entry Inds - Inhalation:
YES

Skin:
YES

Ingestion:
YES

Carcinogenicity Inds - NTP:
YES

IARC:
YES

OSHA:
NO

Health Hazards Acute And Chronic:
INHALE:NASAL/RESPIRATORY IRRITATION,ACUTE CENTRAL NERVOUS SYSTEM DEPRESSION-HEADACHE,DIZZINESS,STAGGERING GAIT,CONFUSION OR UNCONSCIOUSNESS.ASPHYXIATION. SKIN: PROLONG/REPEAT CONTACT CAUSES IRRITATION , DEFATTING OR DERMATITIS. EYE: IRRITATION. INGEST: MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING & DIARRHEA.*

Explanation Of Carcinogenicity:
THE HEXAVALENT CHROMIUM COMPOUND IS LISTED AS A CARCINOGEN BY THE IARC & NTP.

Signs And Symptoms Of Overexposure:
*REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. POSSIBLE LIVER DAMAGE. POSSIBLE LEAD POISONING(METALLIC TASTE, FAT IGUE, SLEEP AND GASTROINT DISTURBANCES,ANEMIA & BRAIN, NERVE SYSTEM, KIDNEY & REPRODUCTIVE EFFECTS).

Medical Cond Aggravated By Exposure:
SKIN, LUNG, EYE CONDITIONS. BIRTH DEFECTS HAVE BEEN OBSERVED IN TESTS ON LAB ANIMALS EXPOSED TO ETHYLENE GLYCOL BY MOUTH.

First Aid:
INHALATION: REMOVE PERSON TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF REQUIRED. IF BREATHING IS DIFFICULT, GIVE OXYGEN. KEEP WARM & QUIET. GET MEDICAL ATTN. SKIN: WASH AREAS WITH SOAP & WATER. DO NOT USE SOLVENTS. REMOVE CONTAMINATED CLOTHING & WASH BEFORE REUSE. GET MEDICAL ATTN. EYES: FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTN. PREFER AN OPHTHALMOLOGIST. INGESTION: GET MEDICAL ATTENTION.

Spill Release Procedures:
REMOVE IGNITE SOURCES. WEAR PERSONAL PROTECTIVE EQUIP. AVOID BREATHING VAPORS & SKIN OR EYE CONTACT. USE NON-SPARK TOOLS. USE EMERGENCY RESPONSE PRO IF MANAGING RELEASE IS BEYOND CAPABILITY OF IN-HOUS E PERSONS. SM:DIKE & ABSORB W/INERT MATERIAL.**

Neutralizing Agent:
**DEPEND ON QUANT & CIRCUM UNAUTHORIZED SPILLS REPORTED TO NAT'L RESPONSE CNTR.

Waste Disposal Methods:
ENSURE MATERIAL IS PACKAGED, STORED, TRANSPORTED & OTHERWISE MANAGED IN ACCORD W/LOCAL,STATE & FED REGS. NO DISPOSAL METHOD IS TO BE USED THAT WOULD POSE ENVIR OR HUMAN HEALTH THREAT INCLUDING ANY WHI CH WOULD CONTAMINATE GROUND/SURFACE WATER.

Handling And Storage Precautions:
KEEP CNTNR TIGHTLY CLOSED. ISOLATE FROM HEAT, ELEC EQUIPMENT, SPARKS. DO NOT STORE ABOVE 120F. STORE FLAMM LIQ IN ACCORD W/NFPA CODES/GOVERNMENT REGS.

Other Precautions:
USE GROUND/BOND PROCEDURES WHEN TRANSFERRING. AVOID FREE FALL OF LIQ. DO NOT SMOKE WHERE MATERIAL IS USED OR STORED.DO NOT APPLY TO HOT SURFACES.EMPTIES MAY CONTAIN EXPLOSIVE VAPORS.DO NOT CUT, PUNCTU RE, WELD ON DRUM.DO NOT TAKE INTERNALLY. 4

Fire and Explosion Hazard Information

Flash Point Method:
N/P

Flash Point:

Flash Point Text:
31.0F,-0.6C

Autoignition Temp:

Autoignition Temp Text:
N/K

Lower Limits:
NE

Upper Limits:
N/K

Extinguishing Media:
EXTINGUISHERS (CARBON DIOXIDE, DRY CHEMICAL OR FOAM).

Fire Fighting Procedures:
WATER SPRAY MAY BE INEFFECTIVE, USE TO COOL EXPOSED CNTNRS (FOG NOZZLE PREFERRED). USE NIOSH/MSHA APPR'D SELF-CONTAINED BREATHING APPARATUS & PROTECT CLOTHES.

Unusual Fire/Explosion Hazard:
VAPORS MAY ACCUMULATE IN CONFINED AREAS, FORM EXPLOSIVE MIX W/AIR, TRAVEL LONG DISTANCES. FLASHBACK/FLAME TO HANDLING SITE MAY OCCUR. CLOSED CNTNRS MAY EXPLODE.

Physical/Chemical Properties

HCC:
F2

NRC/State LIC No:
N/K

Net Prop WT For Ammo:

Boiling Point:

B.P. Text:
171 TO 552F

Melt/Freeze Pt:

M.P/F.P Text:
N/K

Decomp Temp:

Decomp Text:
N/K

Vapor Pres:
N/K

Vapor Density:
> AIR

Volatile Org Content %:

Spec Gravity:
N/K

VOC Pounds/Gallon:

PH: N/K

VOC Grams/Liter:

Viscosity:
N/K

Evaporation Rate & Reference:
SLOWER THAN N-BU AC

Solubility in Water:
N/K

Appearance and Odor:
LIQUID, SOLVENT ODOR

Percent Volatiles by Volume:
61.1

Corrosion Rate:
N/K

Reactivity Data

Stability Indicator:
YES

Stability Condition To Avoid:
N/K

Materials To Avoid:
N/K

Hazardous Decomposition Products:
PRODUCTS OF COMBUSTION ARE HAZARDOUS INCLUDING CARBON MONOXIDE AND CARBON DIOXIDE.

Hazardous Polymerization Indicator:
NO

Conditions To Avoid Polymerization:
N/K

Toxicological Information

Information:N/P

MSDS Transport Information

Information:N/P

Regulatory Information

Sara Title III Information: N/P

Federal Regulatory Information: N/P

State Regulatory Information: N/P

Other Information

Other Information:N/P

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WARRANTY

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