

MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-111/111109-77-4.html> for suppliers of this product.

Composition/Information on Ingredient

Cas:
111109-77-4

Code:
M

RTECS:

Code:
X

Name:
DIPROPYLENE GLYCOL DIMETHYL ETHER 2 Environment

Other REC Limits:
NOT ESTABLISHED

OSHA PEL:
NOT ESTABLISHED

Code:
M

OSHA STEL:
N/P

Code:

ACGIH TLV:
NOT ESTABLISHED

Code:
M

ACGIHSTEL:
N/P

Code:

Control Measures

Respiratory Protection:
NOT REQUIRED UNDER CONDITIONS OF NORMAL USE. IF VAPOR MIST IS PRESENT OR GENERATED, USE A NIOSH CERTIFIED ORGANIC VAPOR MASK.

Ventilation:
LOCAL EXHAUST HOOD OR FAN MAY BE USED.

Protective Gloves:
BUTYL RUBBER GLOVES ARE RECOMMENDED FOR EXTENDED EXPOSURE TO SAFE STRIP.

Eye Protection:
SAFETY GLASSES AND SPLASH PROTECTION REQUIRED.

Other Protective Equipment:
Equipment NONE REQUIRED UNDER NORMAL USE. FOR INTERMITTENT EXPOSURE, OTHER TYPES OF SOLVENT RESISTANT GLOVES, THAN RECOMMENDED ABOVE, MAY BE WORN, INCLUDING NITRILE GLOVES, FOR INTERMITTENT EXPOSURE.

Work Hygienic Practices:
TREAT THIS CHEMICAL WITH RESPECT AND FOLLOW ALL MSDS INSTRUCTIONS. ALSO AVOID EYE AND SKIN CONTACT.

Supplemental Safety and Health:
ALL GLOVES SHOULD BE CHECKED FOR DETERIORATION ON A REGULAR BASIS.

Health Hazards Data

LD50LC50Mixture:
ORAL LD50 (RAT): N/P

Route Of Entry Inds - Inhalation:
YES

Skin:
YES

Ingestion:
YES

Carcinogenicity Inds - NTP:
NO

IARC:
NO

OSHA:
NO

Health Hazards Acute And Chronic:
EYES- IRRITANT. LIQUID CONTACT WILL IRRITATE EYES. SKIN- MAY CAUSE IRRITATION. INHALATION- BREATHING LARGE AMOUNTS MAY BE HARMFUL. CAUSES NOSE, THROAT, RESPIRATORY TRACT IRRITATION. INGESTION- SWAL LOWING LARGE AMOUNTS MAY BE HARMFUL. CAUSE GASTROINTESTINAL IRRITATION. CHRONIC: N-METHYL-2-PYRROLIDONE IS FETOTOXIC WHEN APPLIED DERMALLY AND ORALLY AT HIGH DOSES TO RATS DURING PREGNANCY. DOSES WHI CH PRODUCED FETOTOXCITY WERE NEAR THE LD50, AND THEREFORE DO NOT REFLECT EXPOSURES WHICH WOULD

Explanation Of Carcinogenicity:
NO INGREDIENTS OF A CONCENTRATION OF 0.1% OR GREATER IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN.

Signs And Symptions Of Overexposure:
EYES: IRRITATION, STINGING, TEARING, AND REDNESS. SKIN: IRRITATION, REDNESS, AND BURNING. INHALATION: NOSE, THROAT, AND RESPIRATORY TRACT IRRITATION. INGESTION: GASTROINTESTINAL IRRITATION.

Medical Cond Aggravated By Exposure:
NONE SPECIFIED BY MANUFACTURER.

First Aid:
3 INGESTED-SEEK IMMEDIATE MEDICAL ATTENTION. IF DROWSY OR UNCONSCIOUS, DO NOT GIVE ANYTHING BY MOUTH. PLACE VICTIM ON LEFT SIDE WITH HEAD DOWN. INHALATION-REMOVE TO FRESH AIR. IF BREATHING IS DIFFICULT , GIVE OXYGEN, CALL PHYSICIAN. EYES-IRRIGATE IMMEDIATELY WITH WATER FOR AT LEAST 15 MIN. CALL A PHYSICIAN. SKIN-WASH WITH SOAP AND WATER. THOROUGHLY CLEAN CONTAMINATED CLOTHING AND SHOES AND WASH BEFO RE REUSE. GET MEDICAL ATTENTION.

Spill Release Procedures:
SMALL SPILL: ABSORB LIQUID ON VERMICULITE, FLOOR ABSORBENT, OR OTHER ABSORBENT MATERIAL AND TRANSFER TO HOOD. LARGE SPILLS: ELIMINATE IGNITION SOURCES. WEAR PROTECTIVE CLOTHING. S SPILL AT SOURCE. PREVENT FROM ENTERING DRAINS, SEWERS, STREAMS, ETC. IF RUNOFF OCCURS. NOTIFY AUTHORITIES. TRANSFER ASORBENT, SOIL AND OTHER MATERIALS TO CONTAINERS FOR DISPOSAL.

Neutralizing Agent:
NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods:
NOT CONSIDERED A RCRA REGULATED SUBSTANCE. SOILS REMOVED DURING CLEANING MAY AFFECT HAZARD CLASSIFICATION. IF SPILL/WASTE PRODUCT IS NOT CONTAMINATED WITH A HAZARDOUS MATERIAL, THE WASTE MAY BE DISPOS ED OF LIKE USED OIL (IN MOST STATES). CALL ECOLINK, INC IF ADDITIONAL DISPOSAL INFORMATION IS NEEDE D.

Handling And Storage Precautions:
EMPTY CONTAINER RETAIN RESIDUE. AVOID EXCESSIVE CONTACT WITH FUME/LIQUID. ALL METAL PAILS/ DRUMS SHOULD BE GROUNDED AND OR BONDED WHEN MATERIAL IS TRANSFERRED. ANY USE OF THIS PRODUCT IN ELEVATED TEMP ERATURE PROCESS SHOULD BE THOROUGHLY EVALUATED TO ESTABLISH AND MAINTAIN SAFE OPERATING CONDITIONS.

Other Precautions:
SUDDEN RELEASE OF HOT ORGANIC CHEMICAL VAPORS OR MISTS FROM PROCESS EQUIPMENT OPERATING AT ELEVATED TEMPERATURE MAY RESULT IN IGNITION. KEEP THIS AND ALL CHEMICALS OUT OF REACH OF CHILDREN.

Fire and Explosion Hazard Information

Flash Point Method:
TCC

Flash Point:
=87.8C, 190.F

Flash Point Text:

Autoignition Temp:

Autoignition Temp Text:
N/P

Lower Limits:
1.3

Upper Limits:
9.5

Extinguishing Media:
REGULAR FOAM, WATER FOG, CARBON DIOXIDE, AND DRY CHEMICAL. 4

Fire Fighting Procedures:
KEEP FIRE EXPOSED CONTAINERS COOL WITH WATER. FIRE FIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE WITH APPROPRIATE GEAR AND CHEMICAL RESISTANT PERSONAL PROTECTIVEEQUIPMENT.

Unusual Fire/Explosion Hazard:
VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND OR BE MOVED BY VENTILATION AND IGNITED BY HEAT, PILOT LIGHTS, OTHER FLAMES AND IGNITION SOURCES AT LOCATIONS DISTANT FROM MATERIAL HANDLING POINT. NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT CAN IGNITE EXPLOSIVELY.

Physical/Chemical Properties

HCC:
V4

NRC/State LIC No:
N/R

Net Prop WT For Ammo:

Boiling Point:
=202.2C, 396.F

B.P. Text:

Melt/Freeze Pt:

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

Decomp Temp:

Decomp Text:
UNKNOWN

Vapor Pres:
<1 MM HG

Vapor Density:
3.0

Volatile Org Content %:

Spec Gravity:
1.02

VOC Pounds/Gallon:

PH: N/P

VOC Grams/Liter:

Viscosity:
N/R

Evaporation Rate & Reference:
1.0 (N-BUTYL ACETATE=1)

Solubility in Water:
COMPLETE

Appearance and Odor:
COLORLESS LIQUID; MILD SWEET ODOR.

Percent Volatiles by Volume:
N/K

Korrosion Rate:
UNKNOWN

Reactivity Data

Stability Indicator:
YES

Stability Condition To Avoid:
SOURCES OF IGNITION SUCH AS SPARKS, HOT SPOTS, WELDING, FLAMES, AND CIGARETTES. IGNITION/FLASH MAY RESULT IF CONCENTRATION OF PRODUCT IS IN THE FLAMMABLE RANGE.

Materials To Avoid:
STRONG OXIDIZING AGENTS, PVC, VITON, ABS, BUNA-N, KYNAR, LEXAN, NORYL EN-256, PET.

Hazardous Decomposition Products:
MAY FORM CARBON DIOXIDE AND CARBON MONOXIDE

Hazardous Polymerization Indicator:
NO

Conditions To Avoid Polymerization:
NONE. WILL NOT OCCUR.

Toxicological Information

Information:N/P

MSDS Transport Information

Information:N/P

Regulatory Information

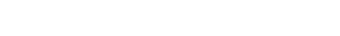
Sara Title III Information: N/P

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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