

MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-403/4035-89-6.html> for suppliers of this product.

Composition/Information on Ingredient

4035-89-6

Code:
M

RTECS:

Code:
X

Name:
ALIPHATIC ISOCYANATE BIURET OF HMDI

Other REC Limits:
NONE RECOMMENDED

OSHA PEL:
NOT ESTABLISHED

Code:
M

OSHA STEL:

Code:

ACGIH TLV:
0.005 PPM TWA

Code:
M

ACGIH STEL:
N/P

Code:
1

Respiratory Protection:

OSHA REGS FOR RESPIRATOR USE. PROVIDE VENT TO KEEP EXPOSURE LEVELS BELOW PEL. USE VAPOR PARTICULATE R SPRTR (TC23C) WHEN BELOW 10X TLV/PEL.

Ventilation:
EXHAUST VENT TO KEEP AIRBORNE CONCENTRATIONS BELOW TLV'S. REMOVE ALL IGNITION SOURCES.

Protective Gloves:
COTTON, NEOPRENE, RUBBER, POLYETHYLENE

Eye Protection:
SPLASH GUARDS, SIDE/FACE SHIELDS, GOGGLES

Other Protective Equipment:
Equipment THE USE OF LONG SLEEVE AND LONG LEG CLOTHING IS RECOMMENDED. REMOVE AND WASH CONTAMINATED CLOTHING BEFORE REUSE.

Work Hygienic Practices:
WASH HANDS BEFORE EATING, SMOKING, OR USING WASHROOM. SMOKE IN SMOKING AREAS ONLY.

Supplemental Safety and Health:
N/K

LD50LC50Mixture:

Route Of Entry Inds - Inhalation:
YES

Skin:
YES

Ingestion:
NO

Carcinogenicity Inds - NTP:
NO

IARC:
NO

OSHA:
NO

Health Hazards Acute And Chronic:
INHAL: RESP TRACT IRRIT, NERV SYS DEPRESS (HEADACHE, DIZZY, STAGGER, CONFUSION, UNCONSCIOUS, COMA). SKIN: ISOCYANATE REACT W/PROTEIN CAUSING IRRIT (SWELL, RED, RASH). ABSORPT: IRRIT, DRYING, DEFATTING (CRACKING). EYE: IRRIT (TEAR, RED, SWELL W/STING). INGEST: IRRIT, CORROSIVE IN GI TRACT. VOMIT MAY CAUSE ASPIRATION-CHEM PNEUMONITIS

Explanation Of Carcinogenicity:
N/K

Signs And Symptoms Of Overexposure:
ACUTE: VAPOR IRRITATING TO EYES, NOSE, THROAT. INHALATION MAY CAUSE HEADACHES, DIFFICULT BREATHING & UNCONSCIOUSNESS. CHRONIC: AS RESULT OF PREVIOUS REPEATED OVEREXPOSURE OR 3 SINGLE LARGE DOSE, SOME WILL DEVELOP ISOCYANATE SENSITIZATION WHICH WILL CAUSE THEM TO REACT TO LATER ISOCYANATE EXPOSURE WELL BELOW TLV.

Medical Cond Aggravated By Exposure:
ASTHMA AND ANY OTHER RESPIRATORY DISORDERS. SKIN ALLERGIES, ECZEMA, AND DERMATITIS. ISOCYANATE SENSITIZATION.

First Aid:
INHAL: MOVE TO FRESH AIR. RESTORE BREATHING. ASTHMATIC TYPE SYMPTOMS MAY DEVELOP. GET MEDICAL AID. SKIN: REMOVE CONTAMINATED CLOTHES. WASH AFFECTED AREAS W/ SOAP & WATER. WASH CONTAMINATED CLOTHING BEFORE REUSE. EYES: FLUSH W/ LUKEWARM WATER (LOW PRESSURE) 15 MIN, OCCASIONALLY LIFTING EYELIDS. GET MED AID. INGESTION: DO NOT INDUCE VOMITING. DO NOT GIVE ANYTHING TO AN UNCONSCIOUS PERSON. GET MED AID.

Spill Release Procedures:
EVACUATE ALL NON-ESSENTIAL PERSONNEL. REMOVE ALL SOURCES OF IGNITION (FLAME, SPARK SOURCES, HOT SURFACES). VENTILATE AREA. CONTAIN AND REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS.

Neutralizing Agent:
N/K

Waste Disposal Methods:
DISPOSE OF WASTE IN ACCORDANCE WITH FEDERAL, STATE, & LOCAL ENVIRONMENTAL CONTROL REGULATIONS. EMPTY CONTAINERS MUST BE HANDLED WITH CARE, DUE TO PRODUCT RESIDUE & FLAMMABLE VAPOR. DON'T INCINERATE CLOSED CONTAINERS. EPA CODE: D001, F003, F005.

Handling And Storage Precautions:
STORE IN BLDGS IN COMPLY W/ OSHA 1910.106. AVOID STORING NEAR HIGH TEMPERATURES/IGNITION SOURCES. STORE IN CLOSED CONTAINERS IN WELL VENTILATED AREA.

Other Precautions:
KEEP CONTAINERS TIGHT & UPRIGHT (PREVENT LEAK). PREVENT PROLONGED VAPOR BREATHING. PROLONGED OVEREXPOSURE MAY

Test Data Method

Flash Point:

Flash Point Text:
23.0F,-5.0C

Autoignition Temp:

Autoignition Temp Text:
N/K

Lower Limits:
1.00

Upper Limits:
11.00

Extinguishing Media:
FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG, WATER SPRAY

Fire Fighting Procedures:
USE FULL PROTECT CLOTH/FIREFIGHT EQUIP W/SCBA. WATER MAY BE USED TO COOL CLSD CNTNRS (PREVENT PRESS BLDUP/AUTOIGNIT/EXPLOS). HDI/IRRIT VAPOR GENERATED BY FIRE.

Unusual Fire/Explosion Hazard:
KEEP CNTNR CLSD. KEEP FROM HEAT/IGNIT SOURCE. CLSD CNTNR MAY EXPLODE W/HEAT. APPLIC TO HOT SURFACE REQ SPECIAL PRECAUTION. OVEREXPOSURE TO DECOMP PROD-HLTH HZD.

Physical/Chemical Properties

F2

NRC/State LIC No:
N/K

Net Prop WT For Ammo:

Boiling Point:

B.P. Text:
175 TO 338F

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:
0.91477

VOC Pounds/Gallon:

PH: N/K

VOC Grams/Liter:

Viscosity:
*

Evaporation Rate & Reference:
3.36 X N-BUTYL ACETATE

Solubility in Water:
INSOLUBLE

Appearance and Odor:
AMBER LIQUID WITH SOLVENT ODOR

Percent Volatiles by Volume:
74.9

Corrosion Rate:
N/K

Reactivity Data

YES

Compatibility: CONTACT WITH MOISTURE, MATERIAL WHICH REACT WITH ISOCYANATES AND HIGH TEMPERATURES.

Materials To Avoid:
WATER, AMINES, STRONG BASES, ALCOHOLS, METAL COMPOUNDS AND SURFACE ACTIVE MATERIALS.

Hazardous Decomposition Products:
5 BY HIGH HEAT/TEMPERATURE: CARBON MONOXIDE, CARBON DIOXIDE, AND OXIDES OF NITROGEN, TRACES OF HCN & HDI.

Hazardous Polymerization Indicator:
NO

Conditions To Avoid Polymerization:
N/K

Toxicological Information

Information:N/P

MSDS Transport Informa

Information: N/P	
Regulatory Information	
Sara Title III Information: N/P	

State Regulatory Information: N/P

Other Information
Other Information:N/P

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WARRANTY

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