

MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-52/52-53-9.html> for suppliers of this product.

Composition/Information on Ingredient

Cas:
52-53-9
Code:
M

RTECS:
YV8300000
Code:
M

Name:
VERAPAMIL

Other REC Limits:
N/K

OSHA PEL:
N/K
Code:
M

OSHA STEL:

Code:

ACGIH TLV:
N/K
Code:
M

ACGIHSTEL:
N/P
Code:

Control Measures

Respiratory Protection:
NIOSH APPROVED RESPIRATOR SHOULD BE AVAILABLE.

Ventilation:
LOCAL EXHAUST RECOMMENDED

Protective Gloves:
DISPOSAL SURGICAL LATEX

Eye Protection:
SAFETY GOGGLES

Other Protective Equipment:
Equipment DISPOSAL PROTECTIVE APPAREL.

Work Hygienic Practices:
REMOVE/LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health:
N/K

Health Hazards Data

LD50LC50Mixture:
ORAL LD50 (MOUSE): 163 MG/KG

Route Of Entry Inds - Inhalation:
YES

Skin:
YES

Ingestion:
YES

Carcinogenicity Inds - NTP:
NO

IARC:
NO

OSHA:
NO

Health Hazards Acute And Chronic:
EYES, SKIN & RESPIRATORY TRACT IRRITATION, EXTREME BRADYCARDIA/ASYSTOLE, ELEVATED LIVER ENZYMES, HEART FAILURE, ATRIOVENTRICULAR BLOCK, DEATH. POSSIBLE HYPERSENTIZATION.

Explanation Of Carcinogenicity:
NONE

Signs And Symptions Of Overexposure:
IRRITATION, HYPOTENSION, RAPID VENTRICULAR RESPONSE

Medical Cond Aggravated By Exposure:
N/K

First Aid:
INHALATION: REMOVE TO FRESH AIR. INGESTION: FLUSH MOUTH W/WATER. SKIN/EYES: FLUSH W/WATER. OBTAIN MEDICAL ATTENTION IN ALL CASES.

Spill Release Procedures:
WEAR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT. VACUUM W/VACUUM CLEANER HAVING A HIGH EFFICIENCY PARTICULATE FILTER/ABSORB LIQUID W/PAPER TOWELS. WIPE SURFACES TO DRYNESS, THEN WASH W/SOAP & WATER.

Neutralizing Agent:
N/K

Waste Disposal Methods:
DISPOSE OF IAW/FEDERAL, STATE & LOCAL REGULATIONS. DON'T MIX W/OTHER SUBSTANCES.

Handling And Storage Precautions:
2 DON'T MIX W/OTHER DRUGS.

Other Precautions:
AVOID CONTACT & INHALATION OF DUST/FUMES/MISTS/VAPORS.

Fire and Explosion Hazard Information

Flash Point Method:
N/P

Flash Point:

Flash Point Text:
N/K

Autoignition Temp:

Autoignition Temp Text:
N/A

Lower Limits:
N/K

Upper Limits:
N/K

Extinguishing Media:
WATER SPRAY, CO2, DRY CHEMICAL/FOAM

Fire Fighting Procedures:
WEAR SELF CONTAINED BREATHING APPARATUS & PROTECTIVE CLOTHING

Unusual Fire/Explosion Hazard:
EMITS TOXIC FUMES

Physical/Chemical Properties

HCC:

NRC/State LIC No:

Net Prop WT For Ammo:

Boiling Point:

B.P. Text:
N/K

Melt/Freeze Pt:

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

Decomp Temp:

Decomp Text:
N/K

Vapor Pres:
N/K

Vapor Density:
N/K

Volatile Org Content %:

Spec Gravity:
N/K

VOC Pounds/Gallon:

PH: 4-6.5

VOC Grams/Liter:

Viscosity:
N/P

Evaporation Rate & Reference:
N/K

Solubility in Water:
COMPLETE

Appearance and Odor:
CLEAR COLORLESS SOLUTION W/PRACTICALLY NO ODOR

Percent Volatiles by Volume:
N/K

Corrosion Rate:
N/K

Reactivity Data

Stability Indicator:
YES

Stability Condition To Avoid:
FREEZE, HEAT, TEMP >86F, LIGHT

Materials To Avoid:
DON'T MIX W/OTHER DRUGS

Hazardous Decomposition Products:
VERAPAMIL HYDROGEN CHLORIDE

Hazardous Polymerization Indicator:
NO

Conditions To Avoid Polymerization:
N/K

Toxicological Information

Information:N/P

MSDS Transport Information

Information:N/P

Regulatory Information

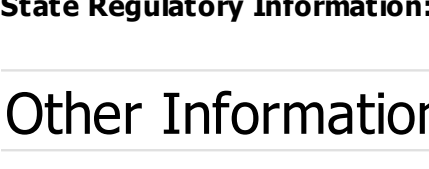
Sara Title III Information: N/P

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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