

# 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

**ACGIH STEL:**

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

**LD50/LC50 Mixture:**

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 HYPERSENSITIZATION.

**Explanation Of Carcinogenicity:**

NONE

**Signs And Symptoms 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:**

N/A

**Lower Limits:**

N/K

**Upper Limits:**

N/K

**Extinguishing Media:**

WATER SPRAY, CO<sub>2</sub>, 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:****Net Prop WT For Ammunition:****Boiling Point:****B.P. Text:**

N/K

**Melt/Freeze Pt:**

N/K

**Decomp Temp:**

N/A

**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

**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

FOR R&D USE ONLY. NOT FOR DRUG, HOUSEHOLD OR OTHER USES.  
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information with regard to appropriate safety is not necessarily based on our knowledge and is not a guarantee of the properties of the product. Lookchem shall not be held liable for any damage resulting from handling or conditions of sale.

## LookChem

Look for Chemicals

www.lookchem.com