

# MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-904/9045-22-1.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**  
9045-22-1  
**Code:**  
M

**RTECS:**

**Code:**  
X

**Name:**  
LITHIUM HEPARIN

**Other REC Limits:**  
NOT ESTABLISHED

**OSHA PEL:**  
NOT ESTABLISHED  
**Code:**  
M

**OSHA STEL:**

**Code:**

**ACGIH TLV:**  
NOT ESTABLISHED  
**Code:**  
M

**ACGIHSTEL:**  
N/P  
**Code:**

## Control Measures

**Respiratory Protection:**  
NOT REQUIRED UNDER NORMAL & INTENDED USES.

**Ventilation:**  
GENERAL ROOM VENTILATION.

**Protective Gloves:**  
RECOMMENDED

**Eye Protection:**  
RECOMMENDED

**Other Protective Equipment:**  
Equipment 4 EMERGENCY EYE BATH.

**Work Hygienic Practices:**  
N/K

**Supplemental Safety and Health:**  
N/K

## Health Hazards Data

**LD50LC50Mixture:**  
ORAL LD50 (RAT) IS UNKNOWN

**Route Of Entry Inds - Inhalation:**  
YES

**Skin:**  
YES

**Ingestion:**  
YES

**Carcinogenicity Inds - NTP:**  
NO

**IARC:**  
NO

**OSHA:**  
NO

**Health Hazards Acute And Chronic:**  
LOCAL IRRITATION, ERYTHEMA, HEMATOMA, ULCERATION MAY FOLLOW DEEP SUBCUTANEOUS INJECTION. INGESTION CAN CAUSE GASTROINTESTINAL IRRITATION.

**Explanation Of Carcinogenicity:**  
NONE

**Signs And Symptions Of Overexposure:**  
IRRITATION, MILD PAIN, NAUSEA, VOMITING, DIARRHEA, NOSEBLEEDS, BLOOD IN URINE, TARRY STOOLS.

**Medical Cond Aggravated By Exposure:**  
HYPERTENSION, CONDITIONS ASSOCIATED W/ INCREASED BLEEDING TENDENCIES, MENSTRUATION, LIVER DISEASE W/IMPAIRED HEMOSTASIS.

**First Aid:**  
EYES/SKIN: WASH WITH LARGE AMOUNTS OF WATER; GET MEDICAL ATTENTION. SUBCUTANEOUS INJECTION: CONTACT A PHYSICIAN IMMEDIATELY; NEUTRALIZE HEPARIN EFFECT. INHALED: MOVE TO FRESH AIR. INGESTED: GIVE 2 GLA SSES OF WATER, INDUCE VOMITING, CALL A PHYSICIAN.

**Spill Release Procedures:**  
FLUSH WITH WATER.

**Neutralizing Agent:**  
N/K

**Waste Disposal Methods:**  
DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE & FEDERAL REGULATIONS. SMALL VOLUMES CAN BE DISPOSED INTO A SEWER SYSTEM.

**Handling And Storage Precautions:**  
STORE & HANDLE ACCORDING TO PACKAGED INSTRUCTIONS. 3

**Other Precautions:**  
BECAUSE HEPARIN IS A MIXTURE OF ACTIVE PRINCIPLES HAVING THE PROPERTY OF PROLONGING CLOTTING TIME OF BLOOD, IT IS NECESSARY TO PREVENT INHALATION.

## Fire and Explosion Hazard Information

**Flash Point Method:**  
N/P

**Flash Point:**

**Flash Point Text:**  
N/K

**Autoignition Temp:**

**Autoignition Temp Text:**  
N/K

**Lower Limits:**  
N/K

**Upper Limits:**  
N/K

**Extinguishing Media:**  
USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

**Fire Fighting Procedures:**  
NONE

**Unusual Fire/Explosion Hazard:**  
N/K

## Physical/Chemical Properties

**HCC:**  
N1

**NRC/State LIC No:**  
N/R

**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:** N/K

**VOC Grams/Liter:**

**Viscosity:**  
N/R

**Evaporation Rate & Reference:**  
N/K

**Solubility in Water:**  
SOLUBLE

**Appearance and Odor:**  
WHITE POWDER. NO CHARACTERISTIC ODOR, IF ANY.

**Percent Volatiles by Volume:**  
N/K

**Corrosion Rate:**  
N/K

## Reactivity Data

**Stability Indicator:**  
YES

**Stability Condition To Avoid:**  
N/K 5

**Materials To Avoid:**  
N/K

**Hazardous Decomposition Products:**  
N/K

**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



For R&D use only. Not for drug, household or other uses.  
WARRANTY  
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 in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Lookchem shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.