

# MATERIAL SAFETY DATA SHEET

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

Click <http://www.lookchem.com/cas-196/19624-22-7.html> for suppliers of this product.

## Composition/Information on Ingredient

**Cas:**

19624-22-7

**Code:**

M

**RTECS:**

RY8925000

**Code:**

M

**Name:**

PENTABORANE (SARA III) 1

**Other REC Limits:**

NONE RECOMMENDED

**OSHA PEL:**

0.005 PPM

**Code:**

M

**OSHA STEL:**

**Code:**

**ACGIH TLV:**

.005PPM/.015STEL9394

**Code:**

M

**ACGIH STEL:**

N/P

**Code:**

## Control Measures

**Respiratory Protection:**

WHEN EXPOSURE POSSIBLE WEAR NIOSH/MSHA APPROVED PRESSURE DEMAND SCBA WITH FULL FACEPIECE.

**Ventilation:**

PROVIDE LOCAL VENTILATION AT ANY POINTS WHERE LEAKS MAY OCCUR.

**Protective Gloves:**

WEAR RUBBER GLOVES.

**Eye Protection:**

WEAR SCBA WITH FULL FACEPIECE.

**Other Protective Equipment:**

Equipment WEAR VINYL OR RUBBER RAIN JACKET, TROUSERS, RUBBER BOOTS, CAP.

**Work Hygienic Practices:**

WASH AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

**Supplemental Safety and Health:**

DO NOT BREATH VAPORS. DO NOT GET IN EYES, ON SKIN, ON CLOTHING. DO NOT CARRY ANYTHING WHICH MAY BE PUT IN MOUTH, SUCH AS CIGARETTES OR FOOD. THIS MSDS HAS BEEN GENERATED FOR A TECHNICAL SUPPORT REQUEST BY USING INFORMATION FROM A SIMILAR ITEM. THE INFORMATION MAY OR MAY NOT BE CORRECT. THE USER MUST EVALUATE THIS INFO. 3

## Health Hazards Data

**LD50/LC50 Mixture:**

ORAL LD50 (RAT) IS UNKNOWN.

**Route Of Entry Inds - Inhalation:**

YES

**Skin:**

YES

**Ingestion:**

YES

**Carcinogenicity Inds - NTP:**

N/P

**IARC:**

N/P

**OSHA:**

N/P

**Health Hazards Acute And Chronic:**

ACUTE: EYES: IRRITATION, CORNEAL OPACITY. SKIN: IRRITATION, FROSTBITE, HIGHLY TOXIC BY SKIN ABSORPTION. INHALATION: HIGHLY TOXIC. INGESTION: HIGHLY TOXIC. CHRONIC: PENTABORANE IS ONLY SLOWLY ELIMINATED FROM BODY, CAN ACCUMULATE TO CAUSE TOXIC EFFECTS. REPEATED EXPOSURES MAKE PERSON MORE SUSCEPTIBLE TO SUBSEQUENT EXPOSURES.

**Explanation Of Carcinogenicity:**

NONE

**Signs And Symptoms Of Overexposure:**

INTOXICATION MAY CAUSE CNS SYMPTOMS, DIZZINESS, BLURRED VISION, MUSCLE SPASMS, HALLUCINATIONS, CONFUSION, HEADACHE, SPASMODIC EYEBALL MOTION, EYELID DROOPING, EUPHORIA, SPASMS, CONVULSIONS, HEPATITIS, LIVER FAILURE, SKELETAL MUSCLE DESTRUCTION, ACIDOSIS, CARDIAC ARREST, CIRCULATORY PROBLEMS, CNS DAMAGE, COMA, DEATH.

**Medical Cond Aggravated By Exposure:**

NO INFORMATION AVAILABLE.

**First Aid:**

EYES: FLUSH WITH LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. FLUSH AREA WITH LARGE AMOUNTS OF WATER. DECOMMINATE SKIN WITH 3% AMMONIA SOLUTION. FLUSH WITH WATER. INHALATION: MOVE TO FRESH AIR. IF NOT BREATHING, GIVE CPR. IF BREATHING DIFFICULT, GIVE OXYGEN. GET MEDICAL ATTENTION. INGESTION: GIVE 2 GLASSES OF WATER AND PERMIT VOMITING IF NAUSEOUS. GET MEDICAL ATTENTION.

**Spill Release Procedures:**

ELIMINATE IGNITION SOURCES. WEAR SCBA AND FULL PROTECTIVE CLOTHING. TAKE PRECAUTIONS TO CONFINE MATERIAL. DECONTAMINATE AREA WITH AQUEOUS SOLUTION OF 3% AMMONIA AND 5% TRI-SODIUM PHOSPHATE DETERGENT. DIKE, COLLECT, INCINERATE ALL CONTAMINATED WATER.

**Neutralizing Agent:**

DECONTAMINATE WITH AQUEOUS SOLUTION OF 3% AMMONIA AND 5% TRI-SODIUM PHOSPHATE.

**Waste Disposal Methods:**

INCINERATE PENTABORANE, ALL RESIDUES, AND ALL WASTE FROM FIRE OR SPILL CLEANUP IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

**Handling And Storage Precautions:**

STORE IN COOL, WELL-VENTILATED AREA, AWAY FROM ANY IGNITION SOURCES AND DIRECT SUNLIGHT. KEEP UNDER NITROGEN ATMOSPHERE. 2

**Other Precautions:**

DO NOT ATTEMPT MAINTENANCE OF CONTAMINATED EQUIPMENT UNTIL IT HAS BEEN CLEANED. ELIMINATE IGNITION SOURCES. VENTILATE AREA. WEAR RECOMMENDED PROTECTIVE GEAR. FOLLOW PROCEDURES FOR SAFELY EXECUTING STO RAGE, HANDLING AND MAINTENANCE.

## Fire and Explosion Hazard Information

**Flash Point Method:**

CC

**Flash Point:**

**Flash Point Text:**

86.0F, 30.0C

**Autoignition Temp:**

**Autoignition Temp Text:**

N/K

**Lower Limits:**

0.42

**Upper Limits:**

98

**Extinguishing Media:**

SMALL FIRES: WATER, FOAM, DRY CHEMICAL. LARGE FIRES: HIGH-EXPANSION FOAM WITH A WATER DELUGE SYSTEM.

**Fire Fighting Procedures:**

WEAR SCBA WITH FULL FACEPIECE AND PROTECTIVE CLOTHING. ALLOW SMALL FIRES TO BURN OUT IF PENTABORANE CAN BE SHUT OFF AND FIRE EXPOSED MATERIALS COOLED WITH WATER.

**Unusual Fire/Explosion Hazard:**

IGNITE EXPLOSIVELY. REACTS SLOWLY WITH WATER AT ROOM TEMPERATURE, RELEASING FLAMMABLE HYDROGEN GAS. MAY FORM SHOCK-SENSITIVE MIXTURES.

## Physical/Chemical Properties

**R1:**

**NRC/State Lic No:**

N/R

**Net Prop WT For Ammo:**

**Boiling Point:**

**B.P. Text:**

140F, 50C

**Melt/Freeze Pt:**

**Decomp Temp:**

**Decomp Text:**

300F, 149C

**Vapor Pres:**

207

**Vapor Density:**

2.2

**Volatile Org Content %:**

N/P

**Spec Gravity:**

0.618

**VOC Pounds/Gallon:**

N/P

**PH:**

N/K

**VOC Grams/Liter:**

N/P

**Viscosity:**

N/P

**Evaporation Rate & Reference:**

UNKNOWN

**Solubility in Water:**

HYDROLYSES SLOWLY

**Appearance and Odor:**

WATER WHITE LIQUID. CHARACTERISTIC PUNGENT ODOR.

**Percent Volatiles by Volume:**

N/K

**Corrosion Rate:**

UNKNOWN

## Reactivity Data

**Stability Indicator:**

NO

**Stability Condition To Avoid:**

RELATIVELY STABLE TO 300F (150C). BEGINS TO DECOMPOSE ABOVE THIS TEMPERATURE, GENERATING HYDROGEN GAS.

**Materials To Avoid:**

AIR, OXYGEN, OXIDIZING AGENTS, HIGHLY OXYGENATED OR HALOGENATED COMPOUNDS, COMPOUNDS WITH REDUCIBLE FUNCTIONAL GROUPS.

**Hazardous Decomposition Products:**

HYDROGEN GAS.

**Hazardous Polymerization Indicator:**

N/P

**Conditions To Avoid Polymerization:**

UNKNOWN

## 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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