

SAFETY DATA SHEET

Zeus 72.2% SL

1 . CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Zeus

Common name: Propamocarb-HCl

CAS code: 25606-41-1

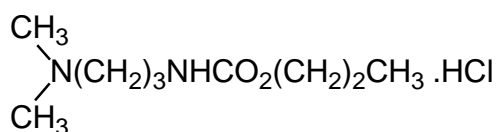
Chemical name: Propyl 3-(dimethylamino) propylcarbamate hydrochloride

Chemical family: Carbamate

Molecular weight: 224.7

M.f. C₉H₂₁ClN₂O₂

Chemical structure:



2 . COMPOSITION, INFORMATION ON INGREDIENTS

CONTENTS	TYPE OF FORMULATIONS		SL
	Common Name	Concentration	Total
ACTIVE INGREDIENT	Propamocarb-HCl	72.2%	72.2%
INERT INGREDIENT	Other	27.8%	27.8%
Total			100%

3. HAZARDS IDENTIFICATION

ACUTE EFFECTS

Physical hazards: None

Health hazards:

Inhalation: Vapour or spray mist may be harmful if inhaled.

Eye: Mild irritating to the eyes.

Skin: Prolonged or repeated skin contact may cause irritation or sensitization.

Ingestion: May be harmful if swallowed.

4. FIRST AID MEASURES

First Aid:

Swallowed:

Provided the patient is conscious, wash out mouth with water. Do not induce vomiting. Vomiting should only be induced under the direction of a physician. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus. Immediately transport victim to an emergency facility.

Eye:

Irrigate for 15 minutes with copious quantities of water with eyelids held open. If irritation persists, seek medical attention immediately.

Skin:

Remove contaminated clothing. Flush skin with running water for a minimum of 20 minutes. If swelling, redness, blistering or irritation occurs seek medical attention immediately.

Inhalation:

Remove victim to fresh air. If not breathing, give artificial respiration preferably mouth-to-mouth. If breathing is labored, give oxygen. Obtain immediate medical attention.

5. FIRE FIGHTING MEASURES

Extinguishing Media:

For small fires, use foam, carbon dioxide or dry powder extinguishant. For large fires, use foam or water-fog, avoid use of water jet. Contain run-off water with for example, temporary earth barriers.

Fire and Explosion Hazards:

Combustible liquid: Keep fire exposed containers cool by spraying with water.

6. ACCIDENTAL RELEASE MEASURES

Contain spill and absorb with sand or proprietary absorbent (vermiculite). Prevent from entering drains, waterway or sewers. Collect in sealed open top containers for disposal. Generously cover the contaminated areas with common, household detergent brush in a small amount of water, work the detergent into the remaining spilled material forming slurry. Collect slurry in sealed open top container for disposal. This material is water pollutant and should be prevented from drainage systems and bodies of water.

Keep out of reach of Children:
Use only in a well-ventilated area. Do not reuse empty containers.
Keep the container closed when not in use. Keep away from food, feed and drinking water. Store in a well ventilated dry place, away from heat and other sources of ignition. Keep from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Natural ventilation only required when handling the concentrate. A local exhaust should be used in confined areas to keep the level of solvent within acceptable limits.

Personnel Protection:

Eye Protection: Safety glasses or goggles.

Clothing: Long sleeved shirt and long pants, shoes and socks.

Gloves: Chemical resistant gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid
Color	pale yellow
Persistent foam test	Accepted (CIPAC F p. 140 MT43)
Density	1.09gm/cm ³ (CIPAC F p.11 MT 3)
pH	6.8 (CIPAC F p.205 MT 75)
Solubility	Soluble

10. STABILITY AND REACTIVITY

Stability:

Stable under room temperature.

Incompatibility:

Strong oxidizing agents. Acids and alkaline materials.

Hazardous Polymerization: Will not occur

Conditions to avoid:

Keep away from heat. Keep away from sources of ignition, No smoking.

11. TOXICOLOGICAL INFORMATION

Technical Active Ingredient:

LD₅₀ oral for rat for Technical grade material:

Propamocarb HCl: 2000 - 2900 mg/Kg.

12. ECOLOGICAL INFORMATION

Keep out of water supplies ground water or open water. This product is very toxic to aquatic organisms.

Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

13. DISPOSAL CONSIDERATIONS

Do not contaminate ponds, waterways or ditches with chemical or used containers. Dispose of in facility permitted for hazardous waste.

14. TRANSPORT INFORMATION

UN NO.: 3077

Class: 9

15. REGULATORY INFORMATION

Fungicide for Agricultural Use.

16. OTHER INFORMATION

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the PRODUCT AS SUCH. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.