



# KAPI LIMITED

## MANUFACTURERS & REFINERS

# MATERIAL SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE SUBSTANCE

Product name:	PALI 50 WP
Usage	Insecticide
Appearance	O White powder
Manufacturer / supplier	Tagros Chemicals India Limited

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component name	CAS No.	Conc. % w/w
Deltamethrin a.i.	52918-63-5	5.0
Other	-----	95.0

## 3. HAZARD IDENTIFICATION

### POTENTIAL HEALTH EFFECTS: EMERGENCY OVERVIEW

<b>Eyes</b>	Mild-irritant
<b>Skin</b>	In severe cases, may cause a transient, localized paresthesia, characterized by tingling, burning or numbness sensation in some individuals
<b>Ingestion</b>	Can cause stomach irritation resulting in nausea, cramps and vomiting. Large doses may cause nasal and respiratory irritation
<b>Inhalation</b>	Excessive inhalation can cause nasal and respiratory irritation
<b>Ecological</b>	Toxic to sh and aquatic organisms

# MATERIAL SAFETY DATA SHEET

## 4. FIRST AID MEASURES

<b>Eyes</b>	Remove immediately with clean water for at least 15 minutes and obtain medical aid
<b>Skin:</b>	Wash with plenty of soap and water. Get medical attention if irritation persists. Cold cream or a moisturizing cream has been successful in diminishing the sensations associated with localized paresthesia.
<b>Ingestion</b>	Wash out mouth with water. Induce vomiting only if medical treatment is not readily available, the patient is fully conscious and the time since ingestion is less than one hour. Keep patient at rest and seek medical advice.
<b>Inhalation</b>	If inhaled, remove to fresh air and keep at rest. Obtain medical aid if at all worried.

## 5. FIRE FIGHTING MEASURES

<b>Flash point</b>	Non flammable
<b>Extinguishing media</b>	CO <sub>2</sub> , dry chemical, foam or water
<b>Special exposure hazards</b>	May give off toxic fumes if heated to decomposition
<b>Protective equipment for firefighting</b>	Do not breathe fumes. Wear self contained breathing apparatus
<b>Fire fighting guidance</b>	As in any fire, wear self-contained apparatus pressure-demand, NIOSH approved (or equivalent) and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Avoid contact with spilled material or contaminated surfaces. If ordinary clothing becomes contaminated remove it immediately. When dealing with the spillage do not eat, drink or smoke and wear personal protective clothing as detailed in section 8.
<b>Environmental precautions</b>	Keep people and animals away. Prevent entry into drains, sewers and watercourses.
<b>Spillage</b>	Contain / absorb spillage in sand / earth or in a suitable inert material. Transfer collected material to heavy-duty plastic drums and keep safe for disposal.

# MATERIAL SAFETY DATA SHEET

## 7. HANDLING AND STORAGE

<b>Handling</b>	Wear chemically impervious gloves such as neoprene or nitrile. Wear safety glasses, goggles or face shield. Mechanical ventilation should be used when handling this product in enclosed spaces. Read and observe all precautions and instructions on the label.
<b>Storage</b>	Store in original containers, upright and closed. Store in areas that are cool, dry and well ventilated. Store away from seeds, fertilizers and animal feed stuffs.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering controls</b>	Mechanical ventilation should be used when handling this product in closed spaces
<b>Respiratory protection</b>	NIOSH approved organic vapor respirator in absence of mechanical ventilation
<b>Hand protection</b>	Wear chemical resistant PVC or nitrile gloves
<b>Eye protection</b>	Wear safety goggles with imperforated side shield or goggles
<b>Other</b>	Wear PVC or chemical resistant disposable overalls and PVC boots

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	Wettable Powder
<b>Colour</b>	Off-white
<b>Odour</b>	Odourless
<b>Density</b>	0.52 g/ml
<b>PH</b>	4.5 to 7.5
<b>Boiling point</b>	Not applicable
<b>Melting point</b>	N/A
<b>Flash point</b>	Non flammable
<b>Solubility in water</b>	Miscible with water

# MATERIAL SAFETY DATA SHEET

**Vapor pressure** N/A

## 10. STABILITY AND REACTIVITY

**Stability** Stable for two years at ambient temperature

**Materials to avoid** None under normal condition of use.

## 11. TOXICOLOGICAL INFORMATION

### Acute studies

<b>Eye</b>	Acute eye irritation in rabbits	Mild- irritant
<b>Skin</b>	Dermal sensitization in Guinea pigs	Non –sensitizer
	Acute dermal LD50 rat	>2000 mg/kg body weight
<b>Ingestion</b>	Acute oral LD50 rat	>2000 mg/kg body weight
<b>Inhalation</b>	Acute inhalation LC50 rat	> 1.09 mg/l of air

### Long term studies

<b>Carcinogenicity</b>	Non carcinogenic in rat and mice
<b>Mutagenicity</b>	Non-mutagenic. Did not cause any chromosomal eects Did not cause any DNA single strand damage.
<b>Reproductive toxicity</b>	No teratogenic effects

## 12. ECOLOGICAL INFORMATION

### **Toxic eects on organisms**

**Fish** Based upon the mortality data 24, 48, 72 and 96 h LC50 of Deltamethrin Technical for Poecilia reticulata were determined as > 3.79, >3.79, 2.53 and 1.74 g/l respectively.

**Aquatic invertebrates** The 24 h EC50 of Deltamethrin Technical forn Daphnia magna was calculated as 4.15 g/l.

# MATERIAL SAFETY DATA SHEET

## 13. DISPOSAL CONSIDERATIONS

<b>Product disposal</b>	Disposal of product would usually be by incineration in an appropriate licensed commercial incinerator. Advice may be obtained from local waste regulation authorities.
<b>Container disposal</b>	Lightly contaminated packaging may be accepted for landfill, otherwise incineration will be required.

## 14. TRANSPORT INFORMATION

<b>Proper shipping Name</b>	PYRETHROID PESTICIDE, SOLID, TOXIC
<b>UN number</b>	3349
<b>UN class</b>	6.1
<b>UN packaging group</b>	III

## 15. REGULATORY INFORMATION

<b>CAS No</b>	52918-63-5
<b>Component name</b>	Deltamethrin

**The following precautions appear in the 'PRECAUTIONS' section of label / leaflet**

WASH HANDS AND EXPOSED SKIN AFTER USE WASH SPLASHES from skin or eyes immediately with plenty of water

The following precautions appear in the 'STATUTORY CONDITIONS RELATING TO USE' box of the label / leaflet FOR USE ONLY AS INSECTICIDE FOR PROFESSIONAL USE WEAR SUITABLE PROTECTIVE CLOTHING / OVERALL AND SYNTHETIC RUBBER / PVC GLOVES AND EYE PROTECTIONS when using.

## 16. OTHER INFORMATION

<b>MSDS first issued</b>	18th February 2003
<b>MSDS data revised</b>	10th March 2009

# MATERIAL SAFETY DATA SHEET

## ***Disclaimer***

The above information is intended to give general health and safety guidance on the storage and transport of the substance or product to which it relates. The requirement or recommendation of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given. The information provided in this safety data sheet is accurate at the date of publication, and will be updated as and when appropriate. No liability will be accepted for any injury loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.



P.O.Box 252-20100, Nakuru, KENYA. Kufanya Road  
Fax: +254 51 2215850 Tel: +254 51 2217134/2217228  
Email: [info@kapiltd.co.ke](mailto:info@kapiltd.co.ke) or Email: [oce@kapiltd.co.ke](mailto:oce@kapiltd.co.ke)  
Web: [www.owerbrand.co.ke](http://www.owerbrand.co.ke) or Web: [www.kenyan-pyrethrum.com](http://www.kenyan-pyrethrum.com)