



Material Safety Data Sheet (MSDS)
Decafon 50 SL

IDENTIFICATION OF THE SUPPLIER:

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PRODUCT IDENTIFICATION:

Common Name: Trichlorfon 50% w/v
Trade Name: Decafon50 SL
Type of formulation: Soluble liquid (SL)
Chemical Name: dimethyl 2,2,2- trichloro-1 hydroxyethyphosphonate.
Chemical Formula: C₄H₈Cl₃O₄P
Molecular Weight: 257.4

PRODUCT COMPOSITION:

Active Ingredient:	% w/v	CAS #
Chlorpyrifos	50 %	[52-68-6]
Inert ingredient:		
Solvent	Up to 100%	--



HAZARDS IDENTIFICATION

Emergency Overview:

Caution! Harmful if swallowed. Moderate eye irritation. Do not take internally. Avoid contact with skin, eyes and clothing. Do not get in eyes or on clothing.

Physical State: liquid, clear

Routes of Exposure: Eye contact, Skin contact, Ingestion, Inhalation

Immediate Effects Eye: Moderate eye irritation. Do not get in eyes.

Skin: May cause slight irritation. Avoid contact with skin and clothing.

Ingestion: Harmful if swallowed. Do not take internally.

Inhalation: Avoid inhalation of vapour or mist.

Chronic or Delayed Long-Term: This product or its components may have target organ effects. This product or its components may have long term (chronic) health effects.

Medical Conditions Aggravated by Exposure:

Any disease, medication or prior exposure which reduces normal cholinesterase activity may increase susceptibility to the toxic effects of the active ingredient. Allow no further exposure to any cholinesterase inhibitor until full recovery is assured.

Potential Environmental Effect: Toxic to fish and wildlife. Extremely toxic to aquatic and estuarine invertebrates.

FIRST-AID MEASURES:

General When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.

Eye: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing eye. Call a physician or poison control center immediately.

Skin: Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.

Ingestion: Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.



Inhalation: Move to fresh air. If person is not breathing, call ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.

FIRE-FIGHTING MEASURES: -

Flash point: 23 °C

Suitable Extinguishing Media: Carbon dioxide (CO₂), Dry chemical, Foam, Water spray

Fire Fighting Instructions: Keep out of smoke. Fight fire from upwind position. Cool closed containers/ tanks exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Whenever possible, contain fire-fighting water by diking area with sand or earth.

In the event of fire and/or explosion do not breathe fumes. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

ACCIDENTAL RELEASE:

Personal Precautions:

Isolate hazard area. Keep unauthorized people away. Avoid contact with spilled product or contaminated surfaces.

Methods for Cleaning Up:

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder). Collect and transfer the product into a properly labeled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional Advice

Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal.

PERSONAL PROTECTION/SAFTETY:

General Protection:

Follow all label instructions. Train employees in safe use of the product. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.



Eye/Face Protection:

Tightly fitting safety goggles

Hand Protection:

Waterproof gloves.

Body Protection:

Wear long-sleeved shirt and long pants and shoes plus socks.

Respiratory Protection:

When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

HANDLING AND STORAGE:

Handling Procedures:

Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Keep away from heat and sources of ignition.

Storing Procedures:

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Work/Hygienic:

Procedures

Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Min/Max Storage:

Temperatures

Do not transport or store above 38 °C / 100 °F

The 30-day storage temperature average must not exceed the recommended maximum.



PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	liquid, clear
PH:	Not available
Density:	approx. 1.08 g/cm ³ at 20 °C

STABILITY AND REACTIVITY

Conditions to Avoid: Heat, flames and sparks. Elevated temperatures

Incompatibility Strong oxidizing agents Bases

Hazardous Decomposition

Products: Thermal decomposition can lead to release of: Carbon monoxide toxic gases/vapours

Hazardous Reactions: Stable under recommended storage conditions.

TOXICOLOGICAL INFORMATION:

Only acute toxicity studies have been performed on this product as formulated. The non-acute information pertains to the technical-grade active ingredient, trichlorfon.

Acute Oral Toxicity: female rat: LD50: 1,098 mg/kg

Acute Dermal Toxicity: rat: LD50: > 2,000 mg/kg

Acute Inhalation Toxicity: rat: LC50: > 2.1 mg/l

Exposure time: 4 h

Determined in the form of liquid aerosol.highest concentration tested

No deaths rat: LC50: > 8.4 mg/l

Exposure time: 1 h

Skin Irritation: rabbit: Slight irritation.

Eye Irritation rabbit: Moderate eye irritation.

Sensitization: guinea pig: Non-sensitizing.

Chronic Toxicity: Trichlorfon caused cholinesterase inhibition, anemia, hypercholesterolemia and/or organ effects (liver, kidney, lung, stomach, intestinal) in chronic studies in rats and monkeys.

Assessment Carcinogenicity:



Trichlorfon was not carcinogenic in a lifetime feeding study in rats. In mice, trichlorfon caused an increased incidence of epithelial mammary tumors in females at the excessive high dose. Based on these findings, EPA has classified trichlorfon as "not likely to be carcinogenic to humans at low doses, but is likely to be carcinogenic at high doses."

Reproductive & Developmental Toxicity:

DEVELOPMENTAL TOXICITY: Trichlorfon is not considered a primary developmental toxicant in rats and rabbits. Developmental effects were observed at doses that caused maternal toxicity.

Neurotoxicity:

Trichlorfon caused neurobehavioral effects ascribed to cholinergic toxicity in acute and subchronic studies in rats. In addition, minimal micropathologic findings were observed in the neural tissues of high-dosed rats following subchronic exposure. In a one-generation developmental neurotoxicity study, neurobehavioral effects were observed in the offspring without any correlating micropathologic findings.

Mutagenicity:

Trichlorfon has produced some positive results in a battery of in vitro and in vivo tests.

ECOLOGICAL INFORMATION: -

Environmental Precautions:

Apply this product as specified on the label. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Do not apply when weather conditions favor runoff or drift. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites.





DISPOSAL CONSIDERATIONS

General Disposal Guidance

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal

Do not re-use empty containers. Completely empty container into application equipment, then dispose of empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities. If burned, stay out of smoke.

