



MATERIAL SAFETY DATA SHEET

Acinapyr -24 SC

IDENTIFICATION OF THE SUPPLIER:

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PRODUCT IDENTIFICATION:

Common Name: Chlofenapyr
Trade Name: Acinapyr 24 SC
Chemical Name: 4-bromo-2-(4-chlorophenyl)-1-(ethoxymethyl)-=5-(trifluoromethyl)-1 H-pyrrole-3-carbonitrile.
Chemical Formula: C₁₅H₁₁BrClF₃N₂O
Molecular Weight: 407.6

PRODUCT COMPOSITION:

<i>Active Ingredient:</i>	% w/v	CAS #
Chlorfenapyr	24% w/v	[122453-73-0]
<i>Inert ingredient:</i>		
Dispersing agent	3.7%	
Wetting agent	5.5%	
Suspension agent	3.9%	
Solvent	up to 100%	



HAZARD IDENTIFICATION:

Likely routes of exposure:

In case of inhalation, skin and eye contact, Chlorfenapyr may cause mild irritation, tearing, nausea, and headache, irritation to mucous membranes and respiratory tract and difficulty breathing.

Skin: Repeated or prolonged skin contact may lead to irritation.

Eye: A mild irritant.

Inhalation: May cause irritation of the mucous membranes, respiratory tract, headache and nausea.

Swallowed: Toxic if swallowed. It may cause headache, vomiting and nausea.

Other Health Hazard Information: Keep out of reach of children, animals and uninformed persons. Have the product container or label with you when calling a poison control centre or doctor.

FIRST-AID MEASURES:

If swallowed: Call doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a doctor. Do not give anything to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a doctor for treatment advice.

If inhaled: Move person to fresh air. If person is not breathing, give artificial respiration, preferably mouth-to-mouth, if possible. Call a doctor for further treatment advice.

If in eyes: Immediately hold eyelids open and flush with a steady, gentle stream of water for 15-20 minutes. Call a doctor for treatment advice.

Note to physician: Treat symptomatically. No specific antidote.

FIRE-FIGHTING MEASURES: -

Flash Point (test method): N/D

Autoignition Temp: N/D

Flammability Limits in Air (% by Vol.):

Lower: N/D

Upper: N/D

NFPA 704 HAZARD CODES

Health: N/R Flammable: N/R Instability: N/R Other: N/R

NFPA 30 Storage Classifications: N/R

Extinguishing Medium: Use water fog, foam, CO₂, or dry chemical extinguishing media.

Special Fire Fighting Procedures: Firefighters should be equipped with self-contained breathing apparatus and turnout gear. Control run-off water- if water enters drainage system, notify authorities downstream.

Unusual Fire Explosion Hazards: None known.



ACCIDENTAL RELEASE MEASURES:

Personal precautions:

Avoid contact with skin and eyes. Do not breathe in spray or fumes. see personal protection section.

Environmental precautions:

Do not allow entering into drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs. Considered as Marine Pollutant.

Occupational spill:

Do not touch-spilled material; stop leak if you can do it without risk. Keep out unprotected persons and animals.

For spills: Recover free liquid with explosion proof pumps, absorb residue with absorptive material such as damp earth or sand or other suitable non-combustible absorbent material. Place the material into a clean, dry container and cover for subsequent disposal. If fire potential exists, blanket spill with foam as a precaution. In situations where product comes in contact with water, contain contaminated water for later disposal. Prevent material from spreading by damming in with absorptive material. Do not flush spilled material into drains. Keep spectators away and upwind.

To decontaminate spill area, tools and equipment, wash with a suitable solution (i.e. organic solvent, detergent bleach or caustic). Add the solution to the drums already collected. Label drums with its content and dispose of it in accordance with local regulations.

Open burning or dumping of this material is prohibited.

HANDLING AND STORAGE:

Handling:

Harmful if inhaled or swallowed. Irritating to eyes and skin.

Avoid contact with eyes and skin, and inhalation of spray and vapour. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Operators should change and wash clothing daily. Remove clothing immediately if the pesticide gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

Storage:

Keep under lock and key and out of reach of unauthorized persons, children and animals. Store in its original labeled container in isolated, dry, cool and well-ventilated area.

Chlorfenapyr becomes unstable on prolonged storage above 37 °C and is rapidly decomposed by u.v. Not to be stored close to foodstuffs, animal feeds and water supplies. Local regulations should be complied with.



STABILITY AND REACTIVITY:

Stability: Stable. Do not store below 32°F. Avoid heat and sunlight.

Conditions to Avoid: Store in original container in cool, dry well ventilated place away from ignition sources, heat or flame.

Chemical Incompatibility: Oxidizing agents.

Hazardous Decomposition

Products: Including oxides of carbon and nitrogen; HCl; HF; HBr.

Hazardous Polymerization: Does not occur.

Conditions to Avoid: Does not polymerize.

Corrosive to Metal: No

Oxidizer: No

PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: Suspension concentrated liquid.

Color: off-white liquid.

Odor: characteristic odor

Flammability: Non-flammable.

Flash point: Not applicable.

Explosion properties: Not explosive

Solubility: Soluble in water

Density: 1.18 g/ml

PH of a 1 % aqueous dilution: 6.4

PERSONAL PROTECTION/SAFTETY:

Respiratory Protection: Supplied air respirators should be worn if large quantities of mist are generated or prolonged exposure possible.

Eye Protection: Chemical goggles when respirator does not provide eye protection.

Protective Clothing: Gloves and protective clothing as necessary to prevent skin contact.

Ventilation: Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

TOXICOLOGICAL INFORMATION:

Data for the formulated product:

Rat (male), Oral LD50 (calculated) = 560 mg/kg

Rat (female), Oral LD50 (calculated) = 567 mg/kg

Rabbit (combined), Dermal LD50 > 2000 mg/kg

Rat (male), Inhalation LC50 (4 hr) = 0.571 mg/L

Rat (female), Inhalation LC50 (4 hr) = 2.43 mg/L

Rat (male), Inhalation LC50 (1 hr - calculated) = 2.284 mg/L





Rat (female), Inhalation LC50 (1 hr - calculated) = 9.72 mg/L

Rabbit, Eye Irritation – Not-irritating

Rabbit, Skin Irritation – Not-irritating

Guinea pig, Dermal Sensitizer – Not a sensitizer

Note: Inhalation data for mists were not used to classify this material for transportation because it is reasonably foreseeable that such concentrations (mists) would not be encountered by a human during transport.

OSHA, NTP, or IARC Carcinogen: Not listed.

ENVIRONMENTAL TOXICITY DATA:

Mobility, Degradability & Accumulation:

Animals In rats, >60 % of orally administered Chlorfenapyr was excreted primarily through faeces within 24 hours. The absorbed residues were metabolised via N-dealkylation, dehalogenation, hydroxylation and conjugation. Parent and less polar metabolites were found in egg, milk and tissues such as fat and liver. Metabolism in hens and goats is similar to that in rats, however in these species, 80 % of orally administered Chlorfenapyr was rapidly excreted. Unexcreted residues were present in kidney and liver. At the potential maximum dietary burden, all residues are <0.01 ppm. Chlorfenapyr is the only significant residue component.

Plants In cotton, citrus, tomato, lettuce and potato, Chlorfenapyr is dealkylated to the insecticidal active component (AC 303268) or debrominated to less toxic metabolites. Chlorfenapyr does not translocate out of treated plant parts. Parent compound is the prominent residue.

Soil/Environment In soil, Chlorfenapyr is the major residue. Debromination to a less toxic metabolite is the primary route; dealkylation is not a primary route of degradation in soil. Koc >10 000 ml/g, indicating Chlorfenapyr is likely to be strongly bound in soils. In water DT50 (direct photo degradation) 4.8-7.5 d; stable to hydrolysis at pH 4, 7 and 9.

ECOTOXICOLOGY:

Birds:

Chlorfenapyr Technical:

Acute oral LD50 for mallard ducks 10, bobwhite quail 34 mg/kg. LC50 (8 d) for mallard ducks 9.4, bobwhite quail 132 ppm.

Fish:

Chlorfenapyr Technical: Very toxic to aquatic organisms.

LC50 (48 h) for carp 500 µg/l. LC50 (96 h) for rainbow trout 7.44, bluegill sunfish 11.6 µg/l.

Bees:

Chlorfenapyr Technical: LD50 0.2 µg/bee.

Earthworm:

NOEC (14 d) for Eisenia foetida 8.4 mg/kg.

Daphnia:

LC50 (96 h) 6.11 µg/l.

Algae:

EC50 for Selenastrum capricornutum 132 ppb.



DISPOSAL CONSIDERATIONS:

Pesticide disposal:

Open dumping or burning of this pesticide is prohibited.

Waste resulting from the use of this product cannot be reused or reprocessed. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers.

Comply with local legislation applying to waste disposal.

Container disposal:

Emptied containers retain vapour and product residues.

Observe all labelled safeguards until container is destroyed.

TRIPLE RINSE empty containers in the following manner:

Invert the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a minimum of 10 % of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner.

Do not re-use the empty container for any other purpose but destroy it by perforation and flattening and bury in an approved dumpsite. Prevent contamination of food, feed stuffs, drinking water and eating utensils.

Comply with local legislation applying to waste disposal.

TRANSPORT INFORMATION:

UN NUMBER: 2902

Road Transport ADR/RID:

Class: 6.1

Packaging group: III

Shipping name: PESTICIDE, LIQUID, TOXIC, N.O.S.

Environmentally Hazardous

Substance, N.O.S.

Maritime Transport IMDG/IMO: MARINE POLLUTANT

Class: 6.1

Packaging group: III

Shipping name: PESTICIDE, LIQUID, TOXIC, N.O.S.

Environmentally Hazardous

Substance, N.O.S.

Considered a marine pollutant.

