



MSDS No.: ANINS003
Effective date: February 2014
Revision: 0

MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product name : NovaFenapyr 360 SC
Active ingredient: Chlorfenapyr
UN No. : **3082**
Supplier : Agrinova
Address : 20 Waitara Road, Pompagalana, Tzaneen, 0850, Limpopo Province,
South Africa
Telephone : 087 630 0377
Fax : 086 556 7634

In case of poisoning call:

Red Cross Poison Information Centre: (021) 689 5227

Tygerberg Poison Information Centre: (021) 931 6129

Griffon Poison Information Centre: 082 446 8946

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Composition	CAS No.	Content % W/V
Chlorfenapyr	122453-73-0	36%
Other ingredients		74%

Ingredients the supplier believes may be harmful: None

SECTION 3: HAZARDS IDENTIFICATION

Emergency Overview

Harmful by Inhalation, in contact with skin and if swallowed :

Harmful if absorbed through skin.

Caution : Causes eye irritation.

Keep out of reach of children.

SECTION 4: FIRST AID MEASURES

Symptoms of human poisoning:

May irritate the eyes, nose, throat and skin. Harmful if inhaled or swallowed.

If swallowed: If swallowed, immediately contact a poison control centre, doctor or nearest hospital for treatment advice, show the Label or container. Rinse mouth with water. Do not give anything by mouth to an unconscious person. Do not induce vomiting unless directed by a physician or a poison control centre. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomit, rinse mouth and administer water.

If in eyes: Immediately flush eyes with clean water, holding eyelids apart for a minimum of 20 minutes. After 5 minutes check for and remove contact lenses, then continue rinsing eye. Obtain medical attention immediately if irritation persists.

If on skin or clothing: Immediately remove contaminated clothing and wash skin, hair and fingernails thoroughly with soap and water. Flush skin with running water for a minimum of 20 minutes. Obtain medical attention if irritation persists. Wash contaminated clothing before re-use.

If inhaled: Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is laboured, give oxygen. Obtain immediate medical attention.

Notes to Physician: Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Fire and Explosion Hazard:

Non-flammable, non-combustible and non-explosive liquid. Minimise the use of water to prevent environmental contamination.

Hazardous Products of Combustion:

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion. May emit oxides of carbon and nitrogen, halogenated hydrocarbons and hydrogen cyanide.

Extinguishing Media:

Water, foam, dry chemical and carbon dioxide (CO₂). Avoid using large volumes of water which would spread the product.

In Case of Fire:

Use appropriate extinguishing media for combustibles in the area. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Decontaminate equipment after use. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff. Prevent runoff to enter sewers, waterways, rivers or dams.

SECTION 6: ACCIDENTIAL RELEASE MEASURES

Personal Precautions:

Wear appropriate personal protective equipment as specified in Section 8.

Environmental Precautions:

Small Spill:

Absorb with sand, soil or other absorbent material. Scrub the spill area with detergent and water. Minimise the use of water to prevent environmental contamination.

Large Spill:

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8.

Cover entire spill with absorbing material and place into compatible disposal container. Scrub the spill area with detergent and water. Collect wash water with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposal.

SECTION 7: HANDLING AND STORAGE

Handling:

Do not eat, drink or smoke while handling this product.

Wash thoroughly with soap and water after handling.

Dispose of wash water where it will not contaminate crops, grazing, dams or rivers.

Storage:

Store in a well-ventilated, secure area out of reach of children, uninformed persons and animals.

Do not store food, beverages or tobacco products in the storage area.

Do not store for prolonged periods in direct sunlight.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye Protection: Where eye contact is likely, use chemical splash goggles.

Emergency Eye Wash: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower for emergency use.

Skin Contact: Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear.

Inhalation: A combination particulate/organic vapor respirator may be necessary until effective engineering controls are installed to comply with occupational exposure limits. Use a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with an HE prefilter.

Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Off white
Odor:	Weak, non-specific odor
Specific Gravity/Density:	$\pm 1.06 \text{ g/cm}^3$ (20 °C)
pH:	6.5 (20 °C)
Explosivity:	Non-explosive
Corrosivity:	Non-corrosive

SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable under normal conditions.
Hazardous Polymerization:	Will not occur.
Materials to Avoid:	Keep away from strong oxidizing agents.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies (Finished Product)

Oral: LD₅₀ (Male Rat) 560 mg/kg, (Female Rat) 567 mg/kg for the formulated product.

Dermal: LD₅₀ (Rabbit) > 2000 mg/kg for formulated product

Inhalation: LC₅₀ (Male Rat)(4 hr) > 571 mg/m³, (Female Rat) > 2430 mg/m³ for the formulated product.

Skin Contact: non-irritating

Eye Contact: non-irritating

Skin Sensitization: Non Sensitizing

SECTION 12: ECOLOGICAL INFORMATION

Known Harmful Effects on the Environment

May adversely affect mite predators and other beneficial organisms.

Other precautions Do Not spray on vegetation where honeybees are foraging. Do Not contaminate dams, waterways or sewers with this product or the containers which have held this product.

Acute Toxicity – Fish The following is data for the active ingredient Chlorfenapyr.

Toxic to Fish - LC₅₀ (96hr) for Rainbow trout is 0.00744 mg/l.

LC₅₀ (96hr) for bluegill sunfish is 0.011 mg/l.

Acute Toxicity – Daphnia

LC₅₀ (48hr) for Daphnia is 0.00611 mg/l for Chlorfenapyr.

Acute Toxicity – Other Organisms

The following data is for the active ingredient: Chlorfenapyr.

LD₅₀ for Mallard duck is 10 mg/kg

LD₅₀ for Bobwhite quail is 34 mg/kg

Bees: Toxic to bees. LD₅₀ 0.2 µg/bee

SECTION 13: DISPOSAL CONSIDERATIONS

Product: Dispose of as hazardous waste. Burn only in controlled high temperature incinerator. Keep out of drains, sewers, ditches and water ways.

Container: Triple rinse according to directions on label. Do not reuse product containers for any other purpose.

Dispose of product containers, waste containers, and residues according to local, regional, national and international regulations.

SECTION 14: TRANSPORT INFORMATION

Storage and Transportation Considered non dangerous for Transport.

Road and Rail Transport

UN No.: 3082

Class: 9

Packaging Group: III

Marine Transport

UN No.: 3082

Class: 9

Packaging Group: III

Air Transport

UN No.: 3082

Class: 9

Packaging Group: III

SECTION 15: REGULATORY INFORMATION

Hazard classification

Class 9

Hazard category

Xn: Harmful

Risk phrase(s)

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

Safety phrase(s)

S13: Keep away from food, drink and animal feeding stuffs.

S2: Keep out of reach of children.

S46: If swallowed, seek medical advice immediately and show this container or label.

Poison schedule: S6

Packaging & Labeling

POISON

KEEP OUT OF REACH OF CHILDREN

READ SAFETY DIRECTIONS BEFORE OPENING OR USING

SECTION 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.

END OF MATERIAL SAFETY DATA SHEET