

MATERIAL SAFETY DATA SHEET

Ladder 240 EC

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1. IDENTIFICATION

Product name: **Ladder 240 EC PCP 29495**
Chemical name of active ingredient(s): **Clodinafop-propargyl: Prop-2-ynyl (R)-2-[4-(5-chloro-3-fluoro-2-pyridinyloxy)phenoxy]propionate**
Manufacturer/Registrant: **Makhteshim Agan of North America, Inc.**
4515 Falls of Neuse Road, Suite 300
Raleigh, NC 27609
Phone: 919-256-9300
For fire, spill, and/or leak emergencies, contact Infotrac: Phone: 1-800-535-5053
For medical emergencies and health and safety inquiries, contact Prosar: Phone: 1-877-250-9291

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NO.	%	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA (CARCINOGEN)
Clodinafop-propargyl	105512-06-9	22.24	NA	NA	NA	NA
Petroleum distillate						
Containing :	64742-94-5					
Naphthalene	91-20-3	7.39	10 ppm 50 mg/m ³	10 ppm 52 mg/m ³	-	NTP – 2* IARC –2B**

*Substances, which may reasonably be anticipated to be carcinogens.

** Substance is possibly carcinogenic to humans.

3. HAZARDS IDENTIFICATIONS

PHYSICAL PROPERTIES

Appearance: Light to dark brown liquid

Odor: Aromatic solvent

EMERGENCY OVERVIEW: CAUTION – POISON. WARNING – EYE AND SKIN IRRITANT. Harmful if swallowed. May irritate eyes. Do not wear contact lenses when using. DO NOT get in eyes or on skin. Avoid contact with clothing.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

PRIMARY ROUTES OF EXPOSURE: Eye and skin contact, ingestion and inhalation.

4. FIRST AID

FIRST AID:

Take the container label or product name and Pest Control Product Registration Number with you when seeking medical attention.

IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to a n unconscious person.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15 -20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Call a poison control centre or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

TOXICOLOGICAL INFORMATION:

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This product contains materials that may cause severe pneumonitis if aspirated. Treat symptomatically for ingestion and/or skin and eye contact. This product contains PETROLEUM DISTILLATES. DO NOT INDUCE VOMITING.

5. FIRE FIGHTING MEASURES

FLASH POINT: 102° C (216° F)

FLAMMABLE LIMITS: LFL/UFL: N/A

EXTINGUISHING MEDIA: Water, foam, CO₂, dry powder, or halon extinguisher.

HAZARDOUS DECOMPOSITION PRODUCTS: Chlorine, nitrogen oxides.

FIRE AND EXPLOSION HAZARDS: During a fire, irritating and possibly toxic gases may be generated by thermal decomposition.

SPECIAL FIRE-FIGHTING PROCEDURES: Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes and products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. Contain run-off water with, for example, temporary earth barriers.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: Dike spill using absorbent or impervious materials such as earth, sand, or clay. Prevent material from entering public sewer system or any waterway. If spilled on the ground, the affected area should be removed and placed in an appropriate container for disposal. Clean up small spills immediately, use proper personal protection. Absorb spill with absorbent material such as pet litter. Sweep up and place in a chemical container. Seal the container and handle in an approved manner. Keep spills out of streams and domestic water supplies. Dike to prevent contamination of local water sources. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes. Dispose of all waste and rinse in the appropriate manner. Decontaminate tools and equipment following cleanup.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Keep out of reach of children. Keep container closed when not in use. Handle and open container in a manner as to prevent spillage. Do not get on skin or in eyes. Do not ingest. Avoid breathing vapors and mists. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet. Wash exposed skin promptly to remove accidental splashes of contact with this material.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store the product in closed original container in a well-ventilated room. Keep out of reach of children, unauthorized persons and animals. Store separate from food, feed, and fertilizer.

STORAGE TEMPERATURE (MIN/MAX): Normal ambient temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON -FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

EYE PROTECTION: Protective eyewear (e.g., goggles or full-face shield).

SKIN PROTECTION: Coveralls over long-sleeved shirt and long pants, chemical-resistant footwear plus socks and head covering (for overhead exposure).

HAND PROTECTION: Chemical-resistant gloves.

RESPIRATOR REQUIREMENTS: In areas with inadequate ventilation a NIOSH -approved chemical cartridge respirator with organic vapor cartridges and pesticide pre-cartridges or a self-contained breathing apparatus may be required when working with this product.

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ADDITIONAL PROTECTIVE MEASURES: Remove contaminated clothing immediately after use. Store and wash contaminated clothing separately from household laundry before reuse. Wash thoroughly with soap and water after handling. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water.

USER SAFETY RECOMMENDATIONS:

Users should:

- Wash hands after using this product and before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

EXPOSURE GUIDELINES: Refer to Section 2.

ENGINEERING CONTROLS: Minimize airborne concentrations.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Light to dark brown liquid

ODOR: Aromatic solvent

FLASH POINT: 102°C (216° F)

pH: 4-6

DENSITY: 1.08g/mL

VISCOSITY: 32.5 mPa(s)

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal use and storage conditions.

CONDITIONS TO AVOID: None known.

MATERIALS TO AVOID: Strong oxidizing agents; Bases; Mineral acids.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Chlorine, nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES

Acute Oral LD50 (Rat):	= 2,000 mg/kg
Acute Dermal LD50 (Rat):	> 2,000 mg/kg
Acute Inhalation LC50 (Rat):	> 5.05 mg/L (4 -hr)
Eye Irritation (Rabbit):	Moderately irritating.
Dermal Irritation (Rabbit):	Mildly irritating
Dermal Sensitization (Guinea Pig):	Not a skin sensitizer

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This product contains a petroleum distillate, which is moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during application. Do not contaminate these systems through direct application, disposal of waste or cleaning of equipment. Do not contaminate streams, rivers, lakes, ponds, wetlands, sloughs, irrigation water, vegetated ditch banks, and water used by livestock or for domestic purposes.

13. DISPOSAL CONSIDERATIONS

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.

PRODUCT DISPOSAL: For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

CONTAINER DISPOSAL: Dispose of product containers, waste containers, and residues according to label instructions and in accordance with provincial requirements.

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If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

14. TRANSPORT INFORMATION

DOT CLASSIFICATION:

Not regulated

INTERNATIONAL TRANSPORTATION:

IMO (vessel): UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Clodinafop-propargyl), 9, PG III, MARINE POLLUTANT

IATA (air): Not regulated

15. REGULATORY INFORMATION

CANADIAN REGULATIONS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the CPR.

Naphthalene is included on the Canadian Ingredient Disclosure List.

Both Naphthalene and Petroleum hydrocarbons are listed on Canada's Domestic Substance List (DSL).

U.S. FEDERAL REGULATIONS:

REGULATIONS UNDER FIFRA: All pesticides are governed under FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.

Section 311/312: Acute health hazard (immediate)

Delayed health hazard (chronic)

Section 313: Naphthalene CAS#: 91-20-3 (7.39%)

CERCLA RQ: Naphthalene RQ=100 lbs (151 gals of product)

CA Prop 65: This product contains a chemical (Naphthalene) that is known to the State of California to cause cancer.

RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or are exempt.

16. OTHER INFORMATION

HAZARD RATINGS	NFPA	HMIS	
HEALTH:	1	1	0 MINIMAL
FLAMMABILITY:	0	0	1 SLIGHT
REACTIVITY:	0	0	2 MODERATE
			3 HIGH
			4 SEVERE

MSDS DATE: 9-11-09.

The information contained herein is given in good faith and is believed to be correct, but no warrant, express or implied, is made. Consult Makhteshim Agan of North America, Inc. for further information.