

CLODEX 100EC™

MATERIAL SAFETY DATA SHEET

SECTION 1 Chemical product and Company identification

Product Name: Clodex 100EC™ (Clodinafop-propargyl)

Chemical name: prop-2-ynyl (R)-2-[4-(5-chlor-3-fluopyridin-2-yloxy)phenoxy]propionate

Formula: C₁₇H₁₃ClFNO₄

Chemical class: Aryloxy-phenoxypropionate Herbicide

Product Use: Commercial Herbicide

Supplier: SINERIA HOLLAND BV

Randwycksingel 20-A015

6229 EE Maastricht The Netherlands

www.sineria.com

SECTION 2 Composition/Information on Ingredients

<u>Product Name</u>	<u>Content</u>	<u>CAS RN</u>
Clodinafop-propargyl	100 gr/lit	105512-06-9
Cloquintocet-mexyl	25 gr/lit	99607-70-2

SECTION 3 Hazards Identification

Emergency overview: Warning!

Causes eye, skin and respiratory passage irritation. Allergic skin reactions are possible. Exposure to high vapor levels may cause headache, dizziness, numbness, nausea, in coordination, or other central nervous system effects.

SECTION 4 First Aid Measures

- Have the product container, label or Material Safety Data Sheet with you when calling us, a poison control center or doctor, or going for treatment.

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Ingestion: If swallowed, call a doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by doctor. Do not give anything by mouth to an unconscious person.

Eye contact: If in eyes, hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes and then continue rinsing eye.

Skin contact: If on skin or clothing, take off contaminated material. Rinse skin immediately with plenty of water for 15-20 minutes. Call doctor for treatment advice.

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

Notes to Physician: There is no specific antidote if this product is ingested. Treat symptomatically. Contains petroleum distillate-vomiting may cause aspiration pneumonia.

Medical condition likely to be aggravated by exposure: Not known

SECTION 5 Fire Fighting Measures

- This product is non-flammable and non-explosive, but can decompose at high temperatures forming toxic gases.

Suitable extinguish media: Dry chemical, carbon dioxide, foam and water.

Fire fighting instructions: As in any fire, wear self-contained breathing apparatus pressure-demand and full protection gear. Keep upwind. Isolate hazard area. Avoid inhalation of smoke and fumes. Avoid breathing vapors. Use water or foam to reduce fumes. Do not touch spilled material. If possible, move containers from area. Extinguish only if flow can be stopped. Use flooding amounts of water as a fog.

SECTION 6 Accidental release measures

General and disposal: Use proper protective equipment to minimize personal exposure. Take all necessary action to prevent and to remedy the effects of the spill. Ensure that the disposal is in compliance with regulations.

Land spill or leaks: 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 area with hard water detergent (e.g. commercial products such as Tide, and span). Pick up wash liquid 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 disposition.



SECTION 7 Handling and storage

Handling: Avoid contact with eyes or clothing. Do not use near heat or open fire.

Users Should: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Storage: Store in a cool, well ventilated and dry place out of reach of children. Keep product in the original container tightly closed. Do not store or consume food, drink or tobacco in areas where they may become contaminated with this material.

SECTION 8 Exposure controls/Personal protection

Ingestion: Prevent eating, drinking, using tobacco and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye contact: In case eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Skin contact: In case skin contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

Inhalation: Use process enclosure, local exhaust ventilation or other engineering controls to keep air borne levels below exposure limits. A NIOSH-certified combination air-purifying respirator with an N, P or R 95 or HE class filter and an organic vapour cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a pressure demand atmosphere-supplying respirator if there is any potential for uncontrolled release, exposure levels are not known, or under any other circumstances where air-purifying respirators may not provide adequate protection.

SECTION 9 Physical & Chemical properties

Appearance: Light to dark brown liquid

Odour: Aromatic

pH: 4-8

Specific Gravity: 1.06 gm/cm³ (20⁰C)

Flammability: Non-Flammable

Behaviour in water: Emulsifiable

Corrosivity: Non corrosive

Combustibility: Combustible

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Explosive properties: Non explosive

SECTION 10 Stability & Reactivity

Stability: Stable under normal condition

Hazardous Polymerization: Will not occur

Incompatibilities: Not reasonably foreseen

SECTION 11 Toxicological Information

Acute Toxicity /Irritation Studies

Ingestion: Acute oral (Rats) LD₅₀ 3.500 mg/kg

Dermal: Acute dermal LD₅₀ (Rats) 5.000 mg/kg

Inhalation: Acute inhalation LC₅₀ (Rats, 4hr) 3.500 mg/m³

Eye Contact: Moderately Irritating (Rabbit)

Skin Contact: Moderately irritating (Rabbit)

Chronic Toxicity Studies

Clodinafop-propargyl technical has been extensively tested on laboratory mammals and in test-tube systems. No evidence of mutagenic, teratogenic or reproductive effects was obtained. Clodinafop-propargyl technical induced liver toxicity and benign and malignant liver tumours in mice fed high daily doses over their lifetime. Rats fed high doses showed mild liver toxicity but did not develop tumours while no liver effects were observed for dogs fed high doses. The liver tumour finding occurring at high doses is believed due to Clodinafop-propargyl inducing proliferative effects genetically pre-existing in mice and has no relevance to humans because the cellular changes which underlie it are rodent specific and have been shown experimentally not to occur in primates

Cloquintocet-mexyl technical has been extensively tested and no evidence of mutagenic, carcinogenic, teratogenic or reproductive effects was obtained.

The **aromatic hydrocarbon mixture** may cause central nervous system depression and necrosis.

SECTION 12 Ecological Information

Clodinafop-propargyl technical:

- Practically non-toxic to birds, crustaceans, earthworms, and soil microorganisms and bees
- Highly toxic to fish [LC50 (96 h) = 0.4 mg/L for rainbow trout].

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Formulated product:

- Moderately toxic to fish and aquatic invertebrates [LC50 (96 h) = 4.9 mg/L for trout].

Cloquintocet-mexyl technical:

- Practically non-toxic to birds, fish, crustaceans, earthworms, soil microorganisms and bees.

SECTION 13 Disposal Considerations

- Triple rinsing or preferably pressure rinsing containers with water. Add the rinsings to the spray tank mix.
- DO NOT dispose of undiluted chemicals on site.
- If recycling, replace cap and return clean containers to recycler or designated collection point.
- If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

SECTION 14 Transport Information

UN No: 3082

Class: 9

Proper Shipping Name: Environmentally Hazardous - SUBSTANCE, LIQUID, N.O.S.

Packing Group: III

Additional information: Solvent naphtha and Clodinafop-propargyl 100%, Marine pollutant

SECTION 15 Regulatory Information

Hazard Symbol: N (Dangerous for the environment)

SECTION 16 Other Information

The information contained in the Material Safety Data Sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for with other materials or in processes other than those specifically described herein.

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