



SAFETY DATA SHEET

PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: HARVEST PYRACLOSTROBIN 250 EC
 ACTIVE: **PYRACLOSTROBIN 250g/L**
 REGISTRATION HOLDER: HARVEST CROP SOLUTIONS (PTY) LTD.
 DISTRIBUTOR: HARVEST CHEMICALS (PTY) LTD.
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1. CHEMICAL PRODUCT

Molecular formula: C₁₉ H₁₈ N₃ O₄Cl
 Molecular weight: 387.3 g/mol
 Chemical family: crop protection product, fungicide, emulsion concentrate (EC)
 Synonyms: pyraclostrobin

2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS Number	Content (W/W)	Hazardous ingredients
175013-18-0	23.7%	Pyraclostrobin
—	76.3%	Other ingredients

3. HAZARDS IDENTIFICATION

Emergency overview

WARNING: POISON. DANGER:
 CAUSES SKIN IRRITATION.
 Causes eye irritation.
 KEEP OUT OF REACH OF CHILDREN.
 Avoid contact with the skin, eyes and clothing.

Potential health effects

See Product Label for additional precautionary statements.

Acute toxicity:

Harmful if swallowed.

Irritation:

Irritating to eyes, respiratory system and skin.

4. FIRST AID MEASURES

If inhaled:

Keep patient calm, remove to fresh air. Assist in breathing if necessary. Consult a physician.

If on skin:

Wash affected areas thoroughly with soap and water. Remove contaminated clothing. If irritation develops, seek medical attention.

If in eyes:

Hold eyelids open to facilitate rinsing. Flush with copious amounts of water for at least 15 minutes. If symptoms persist, seek medical advice.

If swallowed:

Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

Note to physician

Antidote: No known specific antidote.

Treatment: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flash point: 98 °C

Suitable extinguishing media:

foam, dry extinguishing media, carbon dioxide, water spray

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, nitrogen oxide, nitrogen dioxide, Hydrogen chloride, halogenated hydrocarbons, Hydrocarbons,

If product is heated above decomposition temperature, toxic vapours will be released. The substances/group of substances mentioned can be released if the product is involved in a fire.

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions.

Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions:

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Contain contaminated water/firefighting water.

Cleanup:

Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water.

Collect wash water for approved disposal.

7. HANDLING AND STORAGE

Handling

General advice:

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas.

Storage

Storage incompatibility:

General: Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Components with workplace control parameters

Naphthalene	OSHA ACGIH Skin Designation ;	PEL 10 ppm 50 mg/m ³ ; TWA value 10 ppm ; STEL value 15 ppm ;
Naphthalene, 2-methyl-	ACGIH	TWA value 0.5 ppm ; Skin Designation ;
Naphthalene, 1-methyl-	ACGIH	TWA value 0.5 ppm ; Skin Designation ;

Advice on system design:

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

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) TC23C. Chemical/Mechanical type filter system to remove a combination of particles, gas and vapours. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves, Suitable materials, rubber, plastic

Eye protection:

Tightly fitting safety goggles (chemical goggles).

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Wash soiled clothing immediately.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	liquid
Odour:	faint odour, aromatic
Odour threshold:	No data available.
Colour:	dark yellow
pH value:	approx. 6.2 (10 g/l, 20 °C)
crystal separation:	approx. 0 °C
onset of boiling:	approx. 180 °C Information applies to the solvent.

PLANT. CULTIVATE. HARVEST

Vapour pressure:	0.053 hPa
Density:	1.055 g/cm ³ (20 °C)
Bulk density:	not applicable
Partitioning coefficientn-octanol/water (log Pow):	not applicable
Viscosity, dynamic:	8.8 mPa.s(40 °C) approx. 17.5 mPa.s(20 °C)
Solubility in water:	emulsifiable

10. STABILITY AND REACTIVITY

Conditions to avoid:

Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme temperatures. Avoid prolonged exposure to extreme heat. Avoid contamination. Avoid electro-static discharge. Avoid prolonged storage.

Substances to avoid:

strong oxidizing agents

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated. Prolonged thermal loading can result in products of degradation being given off.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

Not an oxidizer.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral:

LD50/rat: approx. 500 mg/kg

LD50/rat/female: 200 - 500 mg/kg

LD50/rat/male: > 500 mg/kg

Moderately toxic.

Inhalation:

LC50/rat: 3.51 mg/l / 4 h

Dermal:

LD50/rat: > 4,000 mg/kg

Sensitization:

modified Buehler test/guinea pig: Skin sensitizing effects were not observed in animal studies.

Genetic toxicity:

Information on: Pyraclostrobin

No mutagenic effect was found in various tests with microorganisms and mammalian cell culture.

Carcinogenicity:

Information on: Pyraclostrobin

In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.

Reproductive toxicity:

Information on: Pyraclostrobin

The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity/teratogenicity:

Information on: Pyraclostrobin

12. ECOLOGICAL AND ECOTOXICOLOGICAL INFORMATION

Environmental fate and transport

Biodegradation:

Evaluation: Not readily biodegradable (by OECD criteria).

Environmental toxicity

Acute and prolonged toxicity to fish:

Rainbow trout/LC50 (96 h): 0.02 mg/l

Oryziaslatipes/LC50 (96 h): > 0.058 - < 0.1 mg/l

Acute toxicity to aquatic invertebrates:

Daphnia magna/EC50 (48 h): 0.0649 mg/l

Toxicity to aquatic plants:

Green algae/EC50 (72 h): 3.32 mg/l

13. DISPOSAL CONSIDERATIONS

Waste disposal of substance:

See product label for disposal and recycling instructions.

14. TRANSPORT INFORMATION

Reference Bill of Lading

15. REGULATORY INFORMATION

- a. Environmental Protection Standards as per Local Authority requirements.
- b. Regulations on safe management on hazardous chemicals (passed by the State Council)
- c. Regulation on Work Safety Licenses (passed by the State Council)
- d. Occupational exposure limits for hazardous agents in the workplace
- e. Regulations on the Control of Agricultural Chemicals (passed by the State Council)

16. OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Agrinova be liable for any claims, losses, or damages of any third party or lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Agrinova has been advised of the possibility of such damages.

