



MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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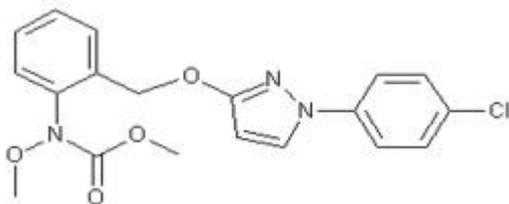
1. Chemical Product Identification

Product Name: Pyraclostrobin 25% EC

Molecular Formula: C₁₉H₁₈ClN₃O₄

Molecular Weight: 387.82

Structural Formula:



Chemical Name:

methylN-{2-[1-(4-chlorophenyl)pyrazol-3-yloxymethyl] phenyl}(N-methoxy)carbamate

CAS No.: 175013-18-0

2. Composition / Information on Ingredients

Composition	CAS No.	Content %
Pyraclostrobin	175013-18-0	25% Min
Splvent naphtha	64742-94-5	50% Max
Fatty alcohol ethoxylate	68002-96-0	25% Max

3. Hazards Identification

Emergency Overview:



Warning: May be fatal if swallowed.

Causes substantial but temporary eye injury.

Causes skin irritation.

Harmful if absorbed through skin.

Keep out of reach of children.

Keep out of reach of domestic animals.

Avoid contact with skin, eyes and clothing.

4. First Aid Measures

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after calling a poison control center or doctor. Do not give anything by mouth to an 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 5 minutes, then continue rinsing eye. Call a poison control center 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 center or doctor for treatment advice.

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

5. Fire-Fighting Measures

Unusual Fire, Explosion and Reactivity Hazards: During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

In Case of Fire: Use dry chemical, foam or CO₂ extinguishing media. 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. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

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: No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Storage: keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Product containers from physical damage. Product against contamination. The authority permits and storage regulations must be observed. Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

8. Exposure Controls/Personal Protection

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, protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection: safety glasses with side-shields (frame goggles)



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

General safety and hygiene measures: wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and eye wash. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary. Take off immediately all contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Appearance: Light yellow to yellow transparency liquid

Odor: Faint odour

pH: 5.0-7.0

Density: 1.06g/cm³ at 20°C

Vapour pressure: 0.053 hPa

Density: 1.06g/cm³ at 20°C

Flash point: approx 203°F

Freezing point: approx 0°C

Boiling point: approx 100°C

10. Stability and Reactivity

Stability: Stable under normal use and storage conditions.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Heat and light.

Hazardous Decomposition Products: Can decompose at high temperatures forming toxic gases.

Materials to Avoid: None known.

11. Toxicological Information

Oral (LD₅₀ Rat): >2000 a.i.mg/kg body weight

Dermal: Dermal (LD₅₀ Rat) : > 2000 a.i.mg/kg body weight



Inhalation: Inhalation (LC₅₀ Rat, 4h): 4.7mg/L

Eye Contact: Slightly- Irritating (Rabbit)

Skin Contact: Slight-Irritating (Rabbit)

Skin Sensitization: Not a skin sensitiser (guinea pigs)

12. Ecological And Ecotoxicological Information

Effect on birds: low toxicity to birds, acute oral LD₅₀ for *Colinus virginianus* is >2000 a.i.mg/kg.

Effect on fish: high toxicity to fish, acute 96 h LC₅₀ for *Oncorhynchus mykiss* is 0.006 a.i.mg/L.

Effect on aquatic invertebrates: high toxicity to aquatic invertebrates, acute 48 hour EC₅₀ for *Daphnia magna* is 0.016 a.i.mg/L.

Effect on algae: moderate toxicity to algae, acute 72 hour EC₅₀ for *Pseudokirchneriella subcapitata* is > 0.843 a.i.mg/L.

Effect on honeybees: low toxicity to honeybees, contact acute 48 h LD₅₀ is >100 a.i.µg/bee; oral acute 48 hour LD₅₀ is >73.1 a.i.µg/bee.

Effect on earthworms: moderate toxicity to earthworms, acute 14 day LC₅₀ for *Eisenia foetida* is 567 a.i.mg/kg.

13. Disposal Considerations

Waste disposal of substance: pesticide wastes are regulated. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions, contact the state pesticide or environmental control agency or the hazardous waste representative at the nearest EPA Regional Office for guidance.

Container disposal: Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Not applicable



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15. Regulatory Information

Not applicable

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. If the recipient subsequently produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.