

Material Safety Data Sheet

SECTION 1 IDENTIFICATION

GHS Product identifier: Pyraclostrobin 98% TC

Other means of identification: /

Chemical name: Methyl N- {2-[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxymethyl}phenyl} (Nmethoxy) Carbamate (IUPAC)

Recommended use of the chemical and restrictions on use: This material is a kind of pesticide.

Company / Undertaking Identification

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SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Skin Corrosion/Irritation Category 3.

Specific target organ toxicity (single exposure) Category1 (nervous system).

Specific target organ toxicity (repeated exposure) Category 2 (blood system, duodenum, liver).

Aquatic toxicity (Acute) Category 1.

Aquatic toxicity (Chronic) Category 1.

GHS Label elements, including precautionary statements:



Signal word: Danger.

Hazard statement(s): Causes mild skin irritation. Causes damage to organs (nervous system) . May cause damage to organs through prolonged or repeated exposure ((blood system, duodenum, liver) . Very toxic to aquatic life with long lasting effects.

Precautionary statement(s):

Prevention: Do not breathe dust/fume/gas/mist/ vapors / spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment.

Response: If skin irritation occurs: Get medical advice/attention. IF exposed or concerned: Call a POISONCENTER/doctor. Specific treatment (see next). Get medical advice/attention if

you feel unwell. Collect spillage.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with relevant regulations.

Other hazards which do not result in classification: /

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Molecular Formula	CAS No.	Concentration, w/w, %
Pyraclostrobin	C ₁₉ H ₁₈ ClN ₃ O ₄	175013-18-0	98.0% Min.

SECTION 4 FIRST AID MEASURES

Description of necessary first aid measures

If inhaled: If breathed in, move person into fresh air. Lay patient down. Keep warm and rested. Prosthesis such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Immediately hold eyelids apart and flush the eye continuously with running water. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms/effects, acute and delayed: /

Indication of immediate medical attention and special treatment needed, if necessary: /

SECTION 5 FIREFIGHTING MEASURES

Suitable extinguishing media: Using water spray or fog, Foam, Dry chemical powder, Carbon dioxide.

Special hazards arising from the chemical: Combustible solid which burns but propagates flame with difficulty. Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion.

Special protective actions for fire-fighters: Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course.

Use firefighting procedures suitable for surrounding area. Do not approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location. If safe to do so, remove containers from path of fire.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Avoid breathing dust and contact with skin and eyes. Wear protective clothing, gloves, safety glasses and dust respirator.

Environmental precautions: Prevent, by any means available, spillage from entering drains or water courses. Use dry clean up procedures and avoid generating dust.

Methods and materials for containment and cleaning up:

Minor Spills : Use dry clean up procedures and avoid generating dust. Vacuum up or sweep up.

Dampen with water to prevent dusting before sweeping. Place in suitable containers for disposal.

Major Spills : Contain spill with sand, earth or vermiculite. Collect recoverable product into labelled containers for recycling. Neutralise/decontaminate residue. Collect solid residues and seal in labelled drums for disposal. Wash area and prevent runoff into drains.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling: Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. When handling, DO NOT eat, drink or smoke. Always wash hands with soap and water after handling.

Conditions for safe storage, including any incompatibilities:

Store in original containers.

Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Appropriate engineering controls: Local exhaust ventilation usually required. If risk of overexposure exists, wear approved respirator. Correct fit is essential to obtain adequate protection. Supplied-air type respirator may be required in special circumstances.

Individual protection measures:

Eye/face protection: Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants.

Skin protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Selection of the Class and Type of respirator will depend upon the level of

breathing zone contaminant and the chemical nature of the contaminant.

Thermal hazards: /

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, colour etc)	Off -white or pale yellow powder
Odour	No characteristic odor
Odour Threshold	N/A
pH	5.0-8.0
Melting point/freezing point	63.7-65.2°C
Initial boiling point and boiling range	N/A
Flash point	132°C
Evaporation rate	N/A
Flammability (solid, gas)	N/A
Upper/lower flammability or explosive limits	N/A
Vapour pressure	2.6×10^{-10} mPa at 20°C
Vapour density	N/A
Relative density	N/A
Solubility(ies)	1.9 ± 0.17 mg/L at 20°C in deionised water at pH 5.8
Partition coefficient: n-octanol/water	log Pow = 3.99 at pH 4 at 20°C
Auto-ignition temperature	N/A
Decomposition temperature	N/A
Viscosity	N/A

SECTION 10 STABILITY AND REACTIVITY

Reactivity: /

Chemical stability: Presence of incompatible materials.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Conditions to avoid: Heat, flames and sparks.

Incompatible materials: Oxidizing agents.

Hazardous decomposition products: carbon monoxide (CO), carbon dioxide (CO₂), hydrogen chloride, phosgene, nitrogen oxides (NO_x), other pyrolysis products typical of burning organic material.

SECTION 11 TOXICOLOGICAL INFORMATION

Information on the likely routes of exposure: Inhaled, swallowed, skin, eyes.

Symptoms related to the physical, chemical and toxicological characteristics: /

Acute health effects: May be harmful if inhaled. May cause respiratory tract irritation. May be harmful if swallowed. May be harmful if absorbed through skin. May cause skin irritation. Causes serious eye irritation.

Chronic health effects: long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems. Long term exposure to high dust concentrations may cause changes in lung function.

Numerical measures of toxicity(such as acute toxicity estimates):

Acute Oral Toxicity (Rat):	Cut off-value: $2000 < LD_{50} \leq 5000$ mg/kg body weight, Be classified in GHS Category 5.
Acute Dermal Toxicity (Rat):	$2000 < LD_{50} \leq 5000$ mg/kg body weight, Be classified in GHS Category 5.
Acute Inhalation Toxicity (Rat)	$LC_{50}(4h) > 0.65$ mg/L, Be classified in GHS Category 3.
Acute Eyes Irritation (Rabbit)	Non-irritant, Could not classified according to GHS.
Acute Dermal Irritation (Rabbit):	Non-irritant, Could not classified according to GHS.
Skin Sensitization (Guinea Pig):	Non-sensitizer.
ADI: 0.03 mg/kg body weight	

SECTION 12 ECOLOGICAL INFORMATION

Toxicity:

Birds (bobwhite quail) :	Acute oral $LD_{50} > 2000$ mg/kg body weight Dietary $LC_{50}(5 d) > 1176$ mg a.s./kg body weight/day.
Fish (rainbow trout) :	$LC_{50}(96 h) = 0.006$ mg/L.
Bees:	Oral $LD_{50} > 73.1$ µg/bee; Contact $LD_{50} > 100$ µg/bee.
Daphnia:	$EC_{50}(48 h) = 0.016$ mg/L.
Algae (Pseudokirchneriella subcapitata) :	$E_rC_{50}(72 h) > 0.843$ mg/L; $E_bC_{50}(72 h) = 0.152$ mg/L.
Worms:	$LC_{50} = 567$ mg/kg soil

Persistence and degradation: /

Bioaccumulative potential: /

Mobility in soil: /

Other adverse effects: /

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal methods: Recycle wherever possible. Consult manufacturer for recycling options or

consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. Treat and neutralise at an approved treatment plant.

SECTION 14 TRANSPORT INFORMATION

UN number: 3077.

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Transport hazard class(es): 9.

Packing group, if applicable: III.

Environmental hazards: Marine pollutants.

Special precautions for user: /

SECTION 15 REGULATORY INFORMATION

Regulations: This safety data sheet is in compliance with the following national standards: GB 16483-2008, GB 13690-2009, GB/T 15098-2008, GB 18218-2009, GB 15258-2009, GB 6944-2012, GB 190-2009, GB 191-2009, GB 12268-2008, GA 57-1993, GBZ 2-2007 as well as the following national regulations: Dangerous Goods Transport Administrative Regulation [Published by the Ministry of Railways, 2008], Dangerous Chemicals Safety Administrative Regulation [Published by the State Council, 2011].

SECTION 16 OTHER INFORMATION

References	UN Recommendations on the Transport of Dangerous Goods Model Regulations UN Globally Harmonized System of Classification and Labelling of Chemicals
Form Date	10-October-2016

Note 1: When products contain two or more hazardous substances, Safety Data Sheets should be prepared based on the risk of the mixture.

Note 2: Manufacturer / supplier should ensure the correctness of the information contained in the safety data sheets, and updated in a timely manner.

Note 3: As a result of product features without the existence of certain information or no data available (such as boiling point does not exist for the solid) in the table with "/" logo.