

MSDS Number: 090

Agrichem (International) Limited

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Material Safety Data Sheet

SECTION 1 Identification of Product Name and Company	
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Product Name:	Prelude 20LF
Synonyms:	Prochloraz CR16051
Intended Use:	Fungicidal seed treatment on linseed and flax

SECTION 2 Hazards Identification	
Most important hazards:	Low oral toxicity in normal handling and use. Irritating to eyes. Harmful if Swallowed Acute effects may include gastro-intestinal irritation and narcosis.

SECTION 3 Composition/Information on Ingredients			
Formulation:	Solution (solvent diacetone alcohol)		
<u>IUPAC Names:</u>	<u>CAS Numbers:</u>	<u>EC Number</u>	<u>Concentration:</u>
N-Propyl-N-[2-(2,4,6,-trichloro-phenoxy)ethyl]imidazole-1- carboxamide/Prochloraz [Xn] R22, [N] R50/53.	67747-09-5	266-994-5	200g/L (19.9% w/w)
Diacetone alcohol [Xi] R36.	123-42-2	204-626-7	>=60% - <=80% w/w

SECTION 4 First Aid Measures	
General advice	Avoid contact with skin, eyes and clothing.
<u>First Aid</u>	If a person feels unwell after coming into contact with this product then seek medical attention immediately. Remove contaminated clothing and wash thoroughly with soap and water. If unconscious, check breathing and pulse (heartbeat). Give artificial ventilation if necessary. If unconscious but breathing and pulse are normal place in recovery position.
Inhalation:	Keep patient calm. Remove to fresh air and obtain medical help.
Ingestion:	Wash out mouth with water. Keep patient at rest. Get medical help immediately and show product label.
Skin Contact:	Remove contaminated clothing immediately and wash affected area with soap and water. Repeat skin contamination procedures until all signs of chemical have gone. Seek medical attention.
Eye Contact:	Flush eyes with clean water for 15-20 minutes and get medical aid at once.
Guide to doctor:	No case of human poisoning is known but effects may include gastrointestinal irritation and narcosis. No specific antidote. Treatment should be supportive and symptomatic.

SECTION 5 Fire Fighting Measures	
Suitable extinguishing media:	This product and packaging is flammable. Foam, dry powder, carbon dioxide, water spray or fog (do not use direct jet of water).
Specific hazards:	In the presence of fire dangerous fumes may be given off; carbon monoxide, carbon dioxide, hydrogen chloride, nitrogen oxides.
Special protective equipment:	Chemical protective clothing and self contained breathing apparatus should be worn.
Further information:	In case of fire, do not breathe fumes. Where product drums are exposed to fire, spray with water to keep cool. Collect separately contaminated extinguishing water and prevent from being flushed into drainage system. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6 Accidental Release Measures	
Personal precautions:	Avoid contact with skin, eyes or clothing. Wear protective gloves, face shield, coveralls and rubber boots. Remove contaminated undergarments and shoes immediately.
Environmental precautions:	Do not discharge into subsoil/soil. Do not contaminate surface waters or ditches with chemical or used containers
Spillage and Decontamination:	Small spillages should be cleared up immediately. Absorb and contain spillages with eg. sand, earth, sawdust, general purpose binder, kieselguhr. For larger amounts, dike spillage and pump off product. Dispose of absorbed material in accordance with local regulations. Collect up contaminated material and store in a labelled container for safe disposal. Wash area with copious amounts of water. Do not allow material to contaminate drains, sewers, watercourses.

SECTION 7 Handling and Storage	
Handling:	No special measures if product is stored and handled correctly. Ensure there is sufficient ventilation of the area. Protection against fire and explosion; prevent electrostatic charge, sources of ignition should be kept well clear. Fire extinguishers should be kept handy.
Storage:	Keep in original container, away from food, drink and animal feeding stuffs. Keep containers tightly closed, in a secure, cool but frost free and well ventilated place, away from heat and sources of ignition. Protect from moisture and direct sunlight. Keep out of reach of children.
Packaging	2 x 10L plastic (HDPE) drums in outer cardboard box. Storage stability: 24 months.

SECTION 8 Exposure Controls/Personal Protection	
National occupational exposure limits:	None assigned in current HSE publication EH40.
Personal protective equipment:	Respiratory protection: Gas filter EN141 Type A for gases vapours of organic compounds, (boiling point >65°C).
Hand protection:	Wear suitable chemical resistant safety gloves (EN 374). With prolonged direct contact, recommend gloves of protective index 6, corresponding to >480 minutes of permeation time (EN 374): eg. Nitrile rubber (0.4mm), chloroprene rubber (0.5mm) or polyvinyl choride (0.7mm) .
Eye protection:	Tightly fitting safety goggles (EN 166).
Body protection:	Must be chosen depending on activity and possible exposure, eg. apron, protective boots, chemical protection suit (according to DIN-EN 465).
General safety and hygiene measures:	Avoid contact with skin, eyes and clothing. Wearing of closed work clothing is strongly recommended. Take off immediately all contaminated clothing. Store work clothes separately. Keep away from food, drink and animal feedingstuffs. No eating, drinking or smoking at the place of work. Hands and/or face should be washed before breaks and at the end of work.

SECTION 9 Physical and Chemical Properties	
Appearance:	Deep red, slightly viscous liquid
Odour:	Odour of solvent
Melting Point:	Not applicable
Flash Point:	57 °C
Explosion Limits:	
L.E.L.	1.8% v/v (diacetone alcohol)
U.E.L.	6.9% v/v (diacetone alcohol)
Density or Relative Density:	1.00 g/ml at 20°C
Vapour Density:	4.0 (diacetone alcohol) Air = 1
Solubility in Water:	Prochloraz Tech: 34mg/L Formulation: partially miscible with water.
Solubility in Organic Solvents:	Prochloraz Tech: Acetone > 600 g/L Dichloromethane > 600 g/L Ethanol > 600 g/L Hexane > 7.5 g/L Xylene > 600 g/L
Other data:	Flammable liquid the vapour of which may form an explosive mixture with air



SECTION 10 Stability and Reactivity (active ingredient)	
Conditions to avoid:	Stable at normal temperatures. No decomposition if stored and handled as prescribed/indicated.
Materials to avoid:	Oxidising agents
Hazardous reactions:	None known.
Hazardous decomposition products:	None known.

SECTION 11 Toxicological Information	
Oral LD ₅₀ :	Acute oral (rat) LD ₅₀ : 2000 mg/kg
Dermal LD ₅₀ :	Acute dermal (rat) LD ₅₀ : >4000 mg/kg
Primary skin irritation:	Rabbit, non-irritant.
Primary irritation of the mucous membrane:	Rabbit, Irritant.
Skin sensitization:	Guinea pig. Skin sensitization was not observed in animal studies.
Further information:	Experiences in Humans. Liver damage. Misuse can be harmful to health.

SECTION 12 Ecological Information for Active Ingredient	
Toxicity to fish:	Oncorhynchus mykiss/ LC ₅₀ (96hr): 1.5 mg/l.
Aquatic invertebrates:	Daphnia magna/EC ₅₀ (48hr): 4.3 mg/l
Aquatic plants:	Selenastrum capricornum/EC ₅₀ (72 hr): 0.1 mg/l.

SECTION 13 Disposal Considerations	
Waste Disposal: (including containers)	Dispose of product concentrate, diluted product and empty containers according to the 'Code of Practice for the Safe use of Pesticides' available from MAFF. Contact Local Authority for advice on the disposal of pesticide waste or ask a reputable waste disposal contractor.

SECTION 14 Transport Information	
UN Number: 1993	Packing Group: III
Sea	
IMDG Class No:	3
Proper Shipping Name:	FLAMMABLE LIQUID, N.O.S. (contains DIACETONE ALCOHOL, PROCHLORAZ 20%)
EMS Number:	3-07
Marine pollutant:	Yes
Road/Rail	
ADR/RID Class No:	3
Proper Shipping Name:	FLAMMABLE LIQUID, N.O.S. (contains DIACETONE ALCOHOL, PROCHLORAZ 20%)
Inland waterway transport	As per ADR Item/letter 31c).
Air	
IACO/IATA Class No:	3 FLAMMABLE LIQUID, N.O.S. (contains DIACETONE ALCOHOL, PROCHLORAZ 20%)

SECTION 15 Regulatory Information MAFF No: 04371	
Classification according to the current UK Chemicals (Hazard Information and Packaging for Supply) Regulations.	
Hazard symbol:	 
	Xn HARMFUL N DANGEROUS FOR THE ENVIRONMENT.
R Phrases :	R36 Irritating to eyes R22 Harmful if swallowed R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S Phrases :	S35 This material and its container must be disposed of in a safe way. S57 Use appropriate containment to avoid environmental contamination.

SECTION 16 Other Information
Full text of hazard symbols and R Phrases if mentioned as hazardous components in chapter 2:
Xn Harmful
N Dangerous for the environment
Xi Irritant.
R22 Harmful if swallowed
R50/53 Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment
R36 Irritating to eyes
The data given in this sheet is based on current knowledge and experience and is given in good faith but without guarantee of accuracy and no liability is accepted whatsoever for any insufficiency or inaccuracy in such data in any case whatsoever.
The purpose of the Material Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regards to materials, properties or use.