1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:	IPCO State Herbicide
Pest Control Product Number:	34597
Product Use:	Agrochemicals/Herbicide
Manufacturer /Supplier:	INTERPROVINCIAL COOPERATIVE LTD. 945 Marion St. Winnipeg, Manitoba R2J 0K7 www.ipco.ca
Effective Date:	22/09/2022
	This product is regulated under authority of the Pest Control Products Act

2: HAZARD IDENTIFICATION

Classified according to UN GHS Version 5

Physical Hazard	None
Eye Irritation	Category 2A
Aspiration Toxicity	Category 1
Carcinogen	Category 2
Hazardous to aquatic environment, acute	Category 1
Hazardous to aquatic environment, chronic	Category 1

Pictograms:

Signal word: DANGER

Hazard statements: Causes serious eye irritation. May be fatal if swallowed and enters airways. Suspected of causing cancer. Very toxic to aquatic life with long lasting effects.

Precautionary statement: Obtain special instructions before use. Do not handle untill all safety precautions have been read and understood. Wash thoroughly after handling. Wear protective gloves and eye protection. Use personal protective equipment as required. Avoid release to the environment.
If exposed or concerned: Get medical advice.
IF IN EYES: Rinse catiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists: Get medical advice. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomitting. Collect spillage.
Store locked up. Store in a well-ventillated place. Keep cool.
Dispose of contents in accordance wit local, state, and federal regulations.

3: COMPOSITION AND INFORMATION ON INGREDIENTS

COMPONENT	CAS NUMBER	% (W/W)
2-methyl-4-chlorophenoxyacetic acid, isooctyl (2-ethylhexyl) ester	29450-45-1	31.7-33.7%
Fluroxypyr methylheptyl ester	81406-37-3	10.0-11.1%

Clopyralid Acid	1702-17-6	5.5-6.0%
Solvent Naphtha (Petroleum), Heavy Aromatic	64742-94-5	30.5-32.5%
Napthalene	91-20-3	<1%
Other Ingredients	Trade Secret	Trade Secret

Synonyms: Mixture of MCPA, Clopyralid, and Fluroxypyr
Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4: FIRST AID MEASURES

Ingestion:	Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
Skin Contact:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.
Eye Contact:	Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.
Inhalation:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.
General Advice:	Take container, label or product name and Pest Control Product Registration Number with you, when seeking medical attention.

5: FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Recommended for large fires: Foam or Water spray. Recommended for small fires: Dry chemical or carbon dioxide.
Special Fire Fighting Procedure:	Firefighters should wear NIOSH approved self-contained breathing apparatus and full firefighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.
Unusual Fire and Explosion Hazards:	If water is used to fight fire or cool containers, dike to prevent runoff contamination of municipal sewers and waterways.
Hazardous Decomposition Materials (Under fire conditions):	May produce gases such as hydrogen chloride and oxides of nitrogen and carbon.

6: ACCIDENTAL RELEASE MEASURES

Personal precautions:	Wear appropriate protective gear for the situation. See Personal Protection information in section 8.
Environmental precautions:	Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.
Methods for containment:	Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.
Methods for cleaning up:	Pump any free liquid into an appropriate closed container. Collect washings for disposal. Decontaminate tools and equipment following cleanup. See section 13: DISPOSAL CONSIDERATIONS for more information.
Other information:	Large spills may be reportable to the National Response Center and/or to local agencies.

7: HANDLING AND STORAGE

Handling:	Avoid contact with skin, eyes or clothing. Users should wash hands before eating,

drinking, chewing gum, using tobacco or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water. Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

Storage: Always store pesticides in a secured warehouse or storage building. Containers should be opened in well-ventilated area. Keep container tightly sealed when not in use. Do not stack cardboard cases more than two pallets high. Do not store near open containers of fertilizers, seed, or other pesticides. Do not contaminate water, food or feed by storage or disposal.

8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Guidelines:

Chemical name	TWA*	STEL**	Reference/Note
MCPA 2-EHE	NE	NE	None found
Fluroxypyr methylheptyl ster	NE	NE	None found
Clopyralid	NE	NE	None found
Solvent Naphtha (Petroleum), Heavy Aromitic*	NE	NE	None found
Napthalene	10	15	ppm
Other Ingredients	NE	NE	None found

*Time-weighted Average, 8-hour unless otherwise noted.

**Short Term Exposure Limit

NE = Not Established

Refer to approved product label for additional exposure control guidance.

Engineering controls: Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal protective equipment:

Eye/Face protection: To avoid contact with eyes, wear chemical goggles, or shield safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

Skin protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes, and chemical-resistant gloves made of barrier laminate, nitrile rubber, neoprene rubber, or viton. An emergency shower or water supply should be readily accessible to the work area.

Respiratory protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure, and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

9: PHYSICAL AND CHEMICAL PROPERTIES

NOTE: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as

a guaranteed analysis or as a specification. If no value is determined for the formulation, the value listed is the most relevant value of the predominant ingredient(s).

Appearance:	Dark amber liquid
Odor:	Pungent
Odor threshold:	No data available
pH:	2.54 (1% w/w dispersion in DIW)
Melting point:	Not applicable
Freezing point:	Not applicable
Boiling point:	No data available
Flash point:	204.8°F (96°C) Pensky-Martens
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Flammability Limit in Air	
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative Density:	1.065 g/cm3
Solubility (ies):	No data available
Partition coefficient:	No data available
Auto ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	21.219 cST@ 20°C, 9.097 cST@ 40°C

10: STABILITY AND REACTIVITY

Reactivity:	Not reactive.
Chemical Stability:	This material is stable under normal handling and storage conditions.
Possibility of hazardous reactions:	Will not occur.
Conditions to avoid:	Excessive heat. Do not store near heat or flame.
Incompatible Materials:	Strong oxidizing agents: bases and acids.
Hazardous decomposition products:	Under fire conditions may produce gases such as hydrogen chloride and oxides of nitrogen and carbon.

11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:	Eye contact, Skin contact
Symptoms of exposure:	Eye contact: Causes substantial but temporary eye injury. Vapors and mist may cause irritation.
	Ingestion: May be harmful if swallowed. The petroleum hydrocarbon component, if aspirated into the respiratory system during ingestion or vomiting may cause mild or severe pulmonary injury, possibly progressing to death.
	Inhalation: Low inhalation toxicity. Overexposure to petroleum hydrocarbon component may cause irritation to respiratory tract, headaches, anesthesia, drowsiness, unconsciousness and other central nervous system effects, possibly including death.
	Delayed, immediate and chronic effects of exposure: None reported.
Acute LD50 Oral:	3,129 mg/kg (rat)

Acute LD50 Dermal:	> 5000 mg/kg (rabbit)
Acute LC50 Inhalation:	2.10 mg/L 4 hr (rat)- Maximum attainable concentration (zero mortality)
Eye irritation:	Moderately irritating (Rabbit)-Maximum mean total score=38.7/Kay & Calendra.
Skin irritation:	Mildly irritating (Rabbit) (PDII=1.7).
Skin Sensitization:	Not a contact sensitizer in guinea pigs following repeated skin exposure.
Subchronic (Target organ) effects:	Repeated overexposure to phenoxy herbicides may cause effects to liver, kidneys, blood chemistry, and gross motor function. Rare cases of peripheral nerve damage have been reported, but extensive animal studies have failed to substantiate these observations, even at high doses for prolonged periods. Repeated overexposure to Fluroxypyr may cause effects to bone marrow, kidney, liver and respiratory tract. Excessive exposure to clopyralid may cause effects to liver and kidneys.
Carcinogenicity/ Chronic Health effects:	The International Agency for Research on Cancer (IARC) lists exposure to chlorophenoxy herbicides as a class 2B carcinogen, the category for limited evidence for carcinogenicity in humans. However, newer rat and mouse lifetime feeding studies did not show carcinogenic potential for MCPA. Fluroxypyr did not cause cancer in laboratory animals. Clopyralid did not cause cancer in laboratory animal studies. The hydrocarbon component contains naphthalene, which is listed by IARC as a class 2B and the U.S. National Toxicology Program as reasonably anticipated to be a human carcinogen. Reproductive toxicity: MCPA studies in laboratory animals have shown testicular effects and lower male fertility. In animal studies, fluroxypyr has shown not to interfere with reproduction. In animal studies, clopyralid did not interfere with reproduction.
Developmental toxicity:	MCPA studies in laboratory animals have shown decreased fetal body weights and delayed development in the offspring at doses toxic to mother animals. Fluroxypyr did not cause birth defects in animals; other effects were seen in the fetus only at doses which caused toxic effects in the mother. Clopyralid caused birth defects in test animals, but only at exaggerated doses that were severely toxic to the mother. No birth defects were observed in animals given clopyralid at doses several times greater than those expected during normal exposure.
Genotoxicity:	There have been some positive and some negative studies, but the weight of evidence is that MCPA is not mutagenic. Animal tests with fluroxypyr did not demonstrate mutagenic effects. In-vitro and animal genetic toxicity studies with clopyralid were negative.

Assessment Carcinogenicity:

Chemical name	ACGIH	IARC	NTP	OSHA
Chlorophenoxy Herbicides (MCPA)	No	2B	No	No
Fluroxypyr	No	No	No	No
Clopyralid	No	No	No	No
Solvent Naphtha (Petroleum), Heavy Aromatic	No	No	No	No
Napthalene	A3	2B	R	No
Other Ingredients	No	No	No	No

12: ECOLOGICAL INFORMATION

Ecotoxicity: Data from laboratory studies conducted on MCPA 2EHE:

96-hour LC50 RainbowTrout: 3.2 mg/L

48-hour EC50 Daphnia Magna :	0.28 mg/L
96-hour LC50 Bluegill Sunfish:	3.9 ± 0.7 mg/L
Bobwhite Quail Oral LD50:	>5,620 ppm
Mallard Duck 8-day Oral LD50:	>5,620 ppm

Data on Fluroxypyr, 1-Methylheptyl Ester:

Fluroxypyr 1-Methylheptyl Ester is highly toxic to aquatic invertebrates on an acute basis (LC50 or EC50 is between 0.1 and 1 mg/L). Concentrations for fish were not determined because they exceed water solubility. Fluroxypyr 1-Methylheptyl Ester is highly insoluble in water. Fluroxypyr 1-Methylheptyl Ester is practically non-toxic to birds on an acute and dietary basis (LD50 >2,000 mg/kg and LC50 >5,000 ppm).

Data from laboratory studies conducted on Clopyralid Acid Technical:

96-hour LC50 RainbowTrout:	104 mg/L
96-hour LC50 Bluegill Sunfish:	125 mg/L
48-hour EC50 Daphnia Magna :	232 mg/L
Honeybee Oral LD50:	100 µg/bee
Bobwhite Quail 8-day Dietary LC50:	>4,640 ppm
Mallard Duck Oral LD50	1,465 mg/kg
Mallard Duck 8-day Dietary LC50:	>4,640 ppm

Environmental Fate:

MCPA2EHE is rapidly de-esterfied to parent MCPA acid in the environment. In soil, MCPA is microbially degraded with a typical half-life of a approximately 10 to 14 days. In laboratory and field studies, Fluroxypyr 1-Methylheptyl Ester rapidly de-esterfied to parent acid in the environment. The typical soil half-life for Fluroxypyr (acid and ester) ranged from one to four weeks. Microbial metabolism is the primary degradation mechanism in soil. The typical aquatic half-life ranged from 4 to 14 days. The bioconcentration for clopyralid is low (BCF <100 or Log Pow <3). Potential for mobility in the soil is very high (Koc between 0 and 50). Biodegradation under aerobic laboratory conditions is below detectable limits. Under aerobic soil conditions, the half-life of clopyralid is 71 days. Clopyralid is not significantly degraded by sunlight.

13: DISPOSAL CONSIDERATIONS

Container Handling and Disposal:

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Disposal should be made in accordance with federal, provincial and local regulations.

Do not reuse container for any purpose. If applicable, return container in accordance with return program. If a recyclable container, dispose of at a container collection site. Contact local distributor, dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site, triple or pressure rinse the empty container adding rinsings to spray tank and make container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

14: TRANSPORT INFORMATION

Canadian TDG Description (Road & Rail): Not regulated

United States: < 119 gallons per completed package: Not regulated

DOT Description: ≥ 119 gallons but <244 gallons per completed package: UN 3082, Environmentally

	Hazardous Substance, Liquid, N.O.S. (Solvent Naphtha (Petroleum), Heavy Aromatic), 9, III, Marine Pollutant
	≥ 244 gallons per completed package: UN 3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Solvent Naphtha (Petroleum), Heavy Aromatic, Naphthalene), 9, III, RQ, Marine Pollutant
IMDG (Transport by sea)**:**	UN 3082, Environmentally Hazardous Substance, Liquid, N.O.S., 9, III, Marine Pollutant, (2-methyl-4-chlorophenoxyacetic acid 2-ethylhexyl ester)
IATA (Transport by air):	UN 3082, Environmentally Hazardous Substance, Liquid, N.O.S., 9, III, Marine Pollutant, (2-methyl-4-chlorophenoxyacetic acid 2-ethylhexyl ester)

15: REGULATORY INFORMATION

Pest Control Products Act Registration Number: 34597

This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. Following is the hazard information required on the pest control product label:

DANGER
EYE AND SKIN IRRITANT

WHMIS exempt.

16: OTHER INFORMATION

Revision Date/Reason:	September 22, 2022/ New SDS
Notice:	The enclosed information is supplied as a customer service and is provided in good faith. Although it has been based on data drawn from sources deemed to be reliable, Interprovincial Cooperative Limited cannot guarantee its accuracy and assumes no responsibility for conditions resulting from its use.