



Interprovincial Cooperative Limited

MATRIX

MATERIAL SAFETY DATA SHEET

1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Matrix*
Product Use: Non-selective weed control
Product Number: 29775

Manufacturer /Supplier: INTERPROVINCIAL COOPERATIVE LTD.
945 Marion St.
Winnipeg, Manitoba
R2J 0K7 www.ipco.ca

Effective Date: June 17, 2016

This product is regulated under authority of the Pest Control Products Act

2: HAZARD IDENTIFICATION

Effects of Overexposure:

Route of Exposure: Inhalation, eye contact, skin contact, ingestion.
Inhalation: A single exposure to vapors is not likely to be hazardous.
Eye Contact: May cause severe irritation with corneal injury, which may result in permanent impairment of vision, even blindness.
Skin Contact: May cause skin irritation.
Ingestion: Moderately toxic; May cause gastrointestinal irritation and ulceration

3: COMPOSITION AND INFORMATION ON INGREDIENTS

COMPONENT	CAS NUMBER	% (W/W)
Glyphosate DMA Salt	4494-04-7	48.68 – 51.71
Other ingredients		48.31 – 51.29

Ingredients not listed are proprietary or non-hazardous

4: FIRST AID MEASURES

Inhalation: Move victim to fresh air. Give artificial respiration ONLY if breathing has stopped. Give cardiopulmonary resuscitation (CPR) if there is no breathing AND no pulse. Obtain medical attention IMMEDIATELY.

Ingestion: If swallowed, induce vomiting immediately by giving two glasses of water and sticking finger down throat. Never give anything by mouth to an unconscious person.

Skin: Flush skin with running water, and then continue flushing with running water for 5 - 10 minutes. Start flushing while removing contaminated clothing. If irritation persists, repeat flushing. Obtain medical attention IMMEDIATELY.

Eyes: In case of contact, immediately flush eyes with plenty of water for 5 - 10 minutes and get medical attention.

Emergency Medical Care: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the SDS, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.

In case of emergency call CANUTEC at 613-996-6666

Interprovincial Cooperative Ltd.; Information Phone: 204-233-3461

Effective Date:

MSDS # 027

PCP# 29775

17-Jun-2016

Page 1 of 4

5: FIRE-FIGHTING MEASURES

Unusual Fire & Explosion Hazards:	This material will not burn until the water has evaporated. Residue can burn. If exposed to fire from another source and water is evaporated, exposure to high temperatures may cause toxic fumes. Dense smoke is produced when product burns.
Extinguishing Media:	To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.
Special Oxidizing Material Hazards:	Not Established
Hazardous Combustion Products:	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and irritating. Combustion products may include and are not limited to: Phosphorus oxides, Nitrogen oxides, Carbon monoxide, and Carbon dioxide.
Special Fire Fighting Procedures:	Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed

6: ACCIDENTAL RELEASE MEASURES

In case of spillage, absorb with inert material and dispose of in accordance with applicable regulations.

7: HANDLING AND STORAGE

Store in a cool, well-ventilated area. Keep away from heat, sparks and filling of containers. Keep away from children; prevent contact with eyes, skin, and clothing. Do not store near fertilizers, foodstuffs, seed, insecticides or fungicides.

Do not contaminate irrigation ditches or domestic water supplies. If this happens notify police and local authorities.

8: EXPOSURE CONTROLS AND PERSONAL PROTECTION**Exposure Limits:**

Potassium salt of N- (phosphonomethyl) glycine; {Potassium salt of glyphosate

LD50-ORAL: > 5000 mg/kg Rat

LD50-DERMAL: > 5600 mg/kg Rabbit

T.L.V. (ACGIH): Not established

LC50: 5.63 mg/L (Rat, 4 hr.)

Special Engineering Controls: Local exhaust ventilation required.

Eye Protection: CSA approved safety glasses with side shields or goggles.

Respiratory Protection: No respiratory protection needed unless mist generated, then a NIOSH/MSHA toxic mist mask suggested.

Hand and Arm: PVC or rubber gloves.

Feet: Rubber boots.

Body: Coveralls.

Other Personal Protection: Recommendations listed above indicate the type of equipment which will provide protection against overexposure to this product. Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.

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PCP# 29775

17-Jun-2016

Page 2 of 4

9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Appearance & Odour:	Yellow, Amine Odour
Specific Gravity:	(@ 20 ⁰ c): 1.2110
Vapour density:	Not established
Solubility in water:	Miscible
Solubility in liquids:	Not established
Freezing point:	- 3 ⁰ c
% volatile by volume:	Not applicable
Boiling point:	100 ⁰ c
Odour threshold (ppm):	Not established
Coefficient of water/oil distribution:	Not applicable
Vapour pressure:	Not established
Evaporation rate:	Not Established
pH:	4.4 – 4.6
Viscosity:	34.4 cps at 20°C
Flash Point & Method:	(⁰ C): > 100 (Tag Closed Cup)
Flammable Limits (% in air):	Lower: Not Applicable Upper: Not Applicable
Autoignition Temperature	Not Applicable

10: STABILITY AND REACTIVITY

Decomposition Temp:	Not Established
Stability:	Stable under normal conditions.
Materials to Avoid:	Avoid contact with: acids, halogens, oxidizers, peroxides, iron, galvanized steel and unlined steel
Hazardous Decomposition Products:	Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Carbon monoxide, carbon dioxide, amines, hydrocarbons, nitrogen oxides, phosphorus oxides. Toxic gasses are release during decomposition.
Hazardous Polymerization or Condensation:	Will not occur.
Conditions to Avoid:	Thermally stable at typical use temperatures. Active ingredient decomposes at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

11: TOXICOLOGICAL INFORMATION

Skin Absorption:	Acute dermal LD50 (Rat)	> 5000 mg/kg.
Ingestion:	Acute oralLD50 (rat)	> 5000 mg/kg.
Inhalation:	LC50	> 5.63 (male and female rats) for 4 hours.
Chronic Health Hazards:	Based largely or completely on information for glyphosate and available data, repeated exposures are not anticipated to cause significant adverse effects.	
Chronic Effects/ Carcinogenicity:	Glyphosate did not cause cancer in laboratory animals.	
Reproductive Toxicity:	Glyphosate, in laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.	
Developmental Toxicity	Glyphosate has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals	
Genotoxicity:	Animal genetic toxicity studies were negative. This material was not mutagenic in an Ames bacterial assay. The following information is based on limited data and/or screening studies. Animal genetic toxicity studies were negative.	

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Page 3 of 4

12: ECOLOGICAL INFORMATION

Bio-concentration potential:	Bio-concentration potential for glyphosate is low (BCF is <100 or Log Pow <3).
Aquatic toxicity:	Glyphosate is slightly toxic to fish and crustaceans on an acute basis (96-hour LC50 or EC50 is between 10 and 100 mg/L in the most sensitive species). Glyphosate is practically non-toxic to aquatic invertebrates on an acute basis (96-hour LC50 or EC50 is >100 mg/L in the most sensitive species). Glyphosate is moderately toxic to aquatic plants and/or algae on an acute basis (96-hour LC50 or EC50 is between 1 and 10 mg/L in the most sensitive species)
Avian Toxicity:	Glyphosate is practically non-toxic to birds on an acute basis (Acute LD50 is >2000 mg/kg in the most sensitive species).
Bees:	Glyphosate is practically non-toxic to bees. (LD50 is >100 µg/bee contact and oral)
Degradation and Metabolism:	In soil: Under field conditions, the degradation half-life of glyphosate ranges from three to 174 days depending on edaphic and climatic conditions. No substantial photodegradation in soil was recorded over 31 days. The major metabolite in soil and water is aminomethylphosphoric acid. In water: In water, the degradation half-life varies from a few to 91 days. Photo-degradation in water occurs under natural conditions. Photo-degradation half-lives in water were about 28 days. In a laboratory whole system with water and sediment, degradation half-life of glyphosate was about 14 days (aerobic) and 14 to 22 days (anaerobic). In plants: Glyphosate slowly metabolizes to aminomethylphosphoric acid, which is the major plant metabolite. In animals: In mammals, following oral administration, glyphosate is very rapidly excreted unchanged, and does not bio-accumulate.

13: DISPOSAL CONSIDERATIONS

Dispose of waste materials in an approved incinerator or waste treatment/disposal facility in accordance with applicable regulations. Do not dispose of wastes in local sewer or with normal waste.

14: TRANSPORT INFORMATION

This product is Not Regulated under regulations of the Transport of Dangerous Goods Act.

15: REGULATORY INFORMATION

Pest Control Products Act Registration Number:	29775
For Information Phone:	204-233-3461
MSDS Status/ Revised Sections:	
Replaces MSDS Dated:	July 08, 2013

16: OTHER INFORMATION

WHMIS Ratings:	D2B
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, IPCO cannot guarantee its accuracy and assumes no responsibility for conditions resulting from its use.

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Page 4 of 4