1. IDENTIFICATION

Product name:	**Florasulam 50 SC Herbicide (PCP Reg. No. 30814)**
Chemical name of active ingredient(s):	Florasulam: N-(2,6-difluorophenyl)-8-fluoro-5-methoxy[1,2,4]triazolo[1,5-c] pyrimidine-2-sulfonamide
Manufacturer/Registrant:	ADAMA Agricultural Solutions Canada Ltd. 302-179 McDermot Ave. Winnipeg, Manitoba, Canada Phone: 1-855-264-6262
For fire, spill, and/or leak emergencies, contact Infotrac:	Phone: 1-800-535-5053
For medical emergencies and health and safety inquiries, contact Prosar:	Phone: 1-877-250-9291

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS NO.	%	OSHA PEL	ACGIH TLV	OSHA TWA	NTP/IARC/ OSHA (Carcinogen)
Florasulam	145701-23-1	4.83	NE	NE	NE	NA
Propylene glycol	57-55-6	5.82	NE	NE	10 mg/m^3 (TWA)(Aerosol)*	NA

NE: Not established; NA: Not applicable.
* AIHA WEEL

3. HAZARDS IDENTIFICATIONS

PHYSICAL PROPERTIES:
Appearance: Opaque white liquid
Odor: Odorless

EMERGENCY OVERVIEW: CAUTION May cause slight eye irritation.

LIKELY ROUTES OF EXPOSURE: Ingestion, skin absorption, inhalation, and eye contact.

SYMPTOMS OF ACUTE EXPOSURE:

Eye Contact: Essentially nonirritating to eyes.
Skin Contact: Brief contact is essentially nonirritating to skin.
Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts.
Inhalation: Vapors are primarily water; single exposure is not likely to be hazardous. No adverse effects are anticipated from single exposure to mist. Excessive exposure may cause irritation to upper respiratory tract (nose and throat). Based on the available data, narcotic effects were not observed.
Ingestion: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.
Aspiration hazard: Based on physical properties, not likely to be an aspiration hazard.
Effects of Repeated Exposure: For the active ingredient(s): In animals, effects have been reported on the following organs: Kidney. Liver. For the minor component(s): In rare cases, repeated excessive exposure to propylene glycol may cause central nervous system effects.

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Combustion products may include trace amounts of: Sulfur oxides. Nitrogen oxides. Hydrogen halides.

4. FIRST AID MEASURES

FIRST AID:

IF SWALLOWED: 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 anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING: 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.

IF INHALED: 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.

IF IN EYES: 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.

Take the container label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION: No specific antidote. Employ supportive care. Treatment should be based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

FLASHPOINT: 99.7ºC (211.46ºF)
FLAMMABLE LIMITS (% in air): Not applicable
AUTOIGNITION TEMPERATURE: Not applicable

EXTINGUISHING MEDIA: dry chemical powder, water spray carbon dioxide, foam.

FIRE AND EXPLOSION HAZARDS: Dangerous gases are evolved in the event of a fire.

FIRE-FIGHTING PROCEDURES: Self-contained breathing apparatus and total protection required in enclosed areas.

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Combustion products may include trace amounts of: Sulfur oxides. Nitrogen oxides. Hydrogen halides.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear suitable protective clothing, gloves and eye/face protection.

ACTION TO TAKE FOR SPILLS: Absorb in sand or other inert material. Collect spills and put it into appropriated container. Dispose of this material and its container at hazardous or special waste collection point.

ADDITIONAL INFORMATION: Environmental precautions: Do not empty into drains. Do not discharge into the environment.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Ventilation required. Handle in accordance with good industrial hygiene and safety procedures.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store in original containers in a secure, dry heated storage. Do not allow contamination of seeds, plants, fertilizers or other pesticides. Do not contaminate food, feedstuffs or domestic water supplies. If containers are damaged or spill occurs, use the product immediately or contain the spill with absorbent materials and dispose of waste.

STORAGE TEMPERATURE (MIN/MAX): Will freeze at -10°C. If frozen, bring to room temperature and agitate before use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, AND PACKAGING OF THE PRODUCT.

FOR COMMERCIAL APPLICATION AND ON-FARM APPLICATIONS, CONSULT THE PRODUCT LABEL.

EYE PROTECTION: Use safety glasses.

HAND PROTECTION: Wear chemical-resistant gloves. Rinse gloves before removal.

SKIN PROTECTION: Wear clean clothing with full length sleeves and pants.

RESPIRATORY PROTECTION: When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

ADDITIONAL PROTECTIVE MEASURES: Discarded clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

EXPOSURE GUIDELINES: Refer to Section 2.

ENGINEERING CONTROLS: Use adequate ventilation to minimize airborne concentrations of this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Opaque white liquid
ODOR: Odorless
FLASH POINT: 99.7ºC (211.46ºF)
pH: 4.85
DENSITY: 1.035 g/mL@ 20° C

10. STABILITY AND REACTIVITY

STABILITY: This product is stable under normal conditions.
CONDITIONS TO AVOID: None known.
MATERIALS TO AVOID: Oxidizing agents, acids, alkali.
HAZARDOUS REACTIONS: See materials to avoid.
HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Combustion products may include trace amounts of: Sulfur oxides. Nitrogen oxides. Hydrogen halides.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES:

Acute Oral LD_{50} (Rat): >2,000 mg/kgAcute Dermal LD_{50} (Rabbit): >2,000 mg/kg
Acute Inhalation LC_{50} (Rat): > 5.6 mg/L (4 hours).
Eye Irritation (Rabbit): Minimally irritating
Dermal Irritation (Rabbit): Non-irritating
Dermal Sensitization (Guinea pig): Not a skin sensitizer.

CARCINOGENICITY: Not carcinogenic.

MUTAGENICITY: Not mutagenic.

REPRODUCTIVE TOXICITY: Not considered to be toxic for the reproductive system.

TERATOGENICITY: Not teratogenic in animal experiments.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This product is very highly toxic to aquatic organisms on an acute basis (LC_{50}/EC_{50} <0.1 mg/L in the most sensitive species). Material is practically non-toxic to birds on an acute basis (LD_{50} > 2,000 mg/kg).

ECOTOXICITY INFORMATION:

Rainbow trout LC_{50} (semi-static test, 96-h): > 100 mg/l
Daphnia magna EC_{50} (immobilization, 48-h): > 100 mg/l
Duckweed EC_{50} (Growth inhibition, cell density reduction, 14-d): 0.0413 mg/l
Green algae EbC_{50} (static test, biomass growth inhibition, 72-h): 0.0611 mg/l
Mallard duck LD_{50} (oral): > 2,250 mg/kg bodyweight.
Bees LD_{50} (oral): > 70.25 ug/bee ; LD_{50} (contact): > 100 ug/bee
Earthworms (LC_{50}): > 1,033 mg/kg

EFATE INFORMATION:

Florasulam: Material is expected to biodegrade only very slowly (in the environment). Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Potential for mobility in soil is very high (Koc between 0 and 50).

Propylene glycol: Material is readily biodegradable. Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process., Potential for mobility in soil is very high (Koc between 0 and 50).

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for cleanup of spills.

CONTAINER DISPOSAL:

Recyclable Containers: Do not reuse this container for any purpose. Recyclable container is to be disposed of at a container collection site. Contact your 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. Add the rinsings to the spray mixture in the tank. Make the empty, rinsed container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements. **Returnable Containers:** For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

14. TRANSPORT INFORMATION

CANADIAN TDG CLASSIFICATION:
Road/Rail: Not regulated
Vessel only: UN 3082, Environmentally hazardous substances, liquid, n.o.s. (Florasulam). 9. PG III, Marine Pollutant

US DOT CLASSIFICATION: Not regulated

INTERNATIONAL TRANSPORTATION:
IMO (vessel): UN 3082, Environmentally Hazardous Substances, Liquid, N.O.S. (Florasulam), 9, PGIII, Marine Pollutant

IATA (air): UN 3082, Environmentally Hazardous Substances, Liquid, N.O.S. (Florasulam), 9, PGIII, Marine Pollutant

15. REGULATORY INFORMATION

CANADIAN REGULATIONS:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR) and the MSDS contains all the information required by the CPR.
Domestic Substances List (DSL) :
All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

U.S. FEDERAL REGULATIONS:

SARA TITLE III CLASSIFICATION:

Section 302:	Not applicable
Section 311/312:	Acute health hazard
Section 313:	Not applicable

CA PROPOSITION 65: Not applicable
CERCLA RQ: Not applicable
RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.
TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or are exempt.

16. OTHER INFORMATION

NFPA HAZARD RATINGS			
HEALTH:	1	0	MINIMAL
FLAMMABILITY:	1	1	SLIGHT
INSTABILITY:	0	2	MODERATE
		3	HIGH
		4	SEVERE

MSDS DATE: 1-18-16 Supercedes version dated 6-5-15, 2-19-13. Changes made to Section 1.

The information herein is given in good faith, but no warrant, express or implied, is made. Consult ADAMA Agricultural Solutions Canada Ltd.. for further information.