



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the  
Hazardous Products Regulation (HPR)

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Revision Number 1

## 1. Identification

### Product identifier

Product Name Flame Glyphosate 360

### Other means of identification

Product Code(s) PMRA Reg. No.: 33088

Synonyms None

### Recommended use of the chemical and restrictions on use

Recommended use Herbicide

Restrictions on use Use only as directed on product label

### Details of the supplier of the safety data sheet

#### Supplier Address

Farmers Business Network Canada, Inc.  
120D 1st Street SW  
Box 5607  
High River, Alberta T1V 1M7  
1-844-200-FARM (3276)

E-mail regulatory@farmersbusinessnetwork.com

### Emergency telephone number

Emergency telephone CHEMTREC: +1-703-527-3887 (INTERNATIONAL)  
1-800-424-9300 (NORTH AMERICA)  
24/7 Health Emergencies: Call 800-858-7378 (National Pesticide Information Center)

## 2. Hazard(s) identification

### Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 1B

### Label elements

#### **Danger**

#### **Hazard statements**

Harmful if swallowed  
Fatal if inhaled  
Causes serious eye damage  
May cause cancer

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Wear protective gloves, protective clothing, eye protection and face protection  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Use only outdoors or in a well-ventilated area  
 Wear respiratory protection  
 Do not breathe vapor or mist

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a POISON CENTER or doctor

**Inhalation**

IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 Immediately call a POISON CENTER or doctor

**Ingestion**

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
 Rinse mouth

**Precautionary Statements - Storage**

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents and container to an approved waste disposal plant

**Other information**

Causes mild skin irritation. Toxic to aquatic life with long lasting effects.

### 3. Composition/information on ingredients

**Substance**

Not applicable.

**Mixture**

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Glyphosate isopropylamine salt	38641-94-0	40 - 50	-	
Amines, tallow alkyl, ethoxylated	61791-26-2	10 - 20	-	
Isopropylamine	75-31-0	1 - 5	-	

### 4. First-aid measures

**Description of first aid measures**

<b>General advice</b>	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. IF exposed or concerned: Get medical advice/attention.
<b>Inhalation</b>	Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Get medical attention immediately if symptoms occur.
<b>Eye contact</b>	Get immediate medical attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.
<b>Self-protection of the first aider</b>	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist.

**Most important symptoms and effects, both acute and delayed**

<b>Symptoms</b>	Coughing and/ or wheezing. Difficulty in breathing. Burning sensation. Prolonged contact may cause redness and irritation.
<b>Effects of Exposure</b>	May cause cancer.

**Indication of any immediate medical attention and special treatment needed**

<b>Note to physicians</b>	Treat symptomatically.
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**5. Fire-fighting measures**

<b>Suitable Extinguishing Media</b>	Dry chemical, CO2, water spray or regular foam.
<b>Unsuitable extinguishing media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	None.
<b>Sensitivity to static discharge</b>	None.
<b>Special protective equipment and precautions for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**6. Accidental release measures****Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal
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protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Do not breathe vapor or mist.

**Other information** Refer to protective measures listed in Sections 7 and 8.

### **Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

## **7. Handling and storage**

### **Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes.

### **Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.

## **8. Exposure controls/personal protection**

### **Control parameters**

#### **Exposure Limits**

Chemical name	Alberta	British Columbia	Ontario	Quebec
Isopropylamine 75-31-0	TWA: 5 ppm TWA: 12 mg/m <sup>3</sup> STEL: 10 ppm STEL: 24 mg/m <sup>3</sup>	TWA: 5 ppm STEL: 10 ppm Skin	TWA: 5 ppm STEL: 10 ppm	TWA: 5 ppm TWA: 12 mg/m <sup>3</sup> STEL: 10 ppm STEL: 24 mg/m <sup>3</sup>

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
Isopropylamine	TWA: 2 ppm STEL: 5 ppm Skin	TWA: 5 ppm STEL: 10 ppm	TWA: 2 ppm STEL: 5 ppm Skin	TWA: 2 ppm STEL: 5 ppm Skin

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
Isopropylamine	TWA: 5 ppm STEL: 10 ppm	TWA: 2 ppm STEL: 5 ppm	TWA: 5 ppm STEL: 10 ppm	TWA: 5 ppm TWA: 12 mg/m <sup>3</sup> STEL: 10 ppm STEL: 24 mg/m <sup>3</sup>

### **Appropriate engineering controls**

**Engineering controls** Showers

Eyewash stations  
Ventilation systems.

#### Individual protection measures, such as personal protective equipment

<b>Eye/face protection</b>	Tight sealing safety goggles.
<b>Hand protection</b>	Wear suitable gloves.
<b>Skin and body protection</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
<b>Environmental exposure controls</b>	Avoid release to the environment.
<b>General hygiene considerations</b>	Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Yellow liquid
<b>Physical state</b>	Liquid
<b>Color</b>	Yellow
<b>Odor</b>	Odorless
<b>Odor threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	4.4 - 5	
<b>Melting point / freezing point</b>		No data available
<b>Initial boiling point and boiling range</b>	112 °C / 233.6 / °F	
<b>Flash point</b>	> 93 °C / > 200 °F	
<b>Evaporation rate</b>		No data available
<b>Flammability</b>		No data available
<b>Flammability Limit in Air</b>		
<b>Upper flammability or explosive limits</b>		No data available
<b>Lower flammability or explosive limits</b>		No data available
<b>Vapor pressure</b>		No data available
<b>Relative vapor density</b>		No data available
<b>Relative density</b>		No data available
<b>Water solubility</b>		No data available
<b>Solubility in other solvents</b>		No data available
<b>Partition coefficient</b>		No data available
<b>Autoignition temperature</b>		No data available
<b>Decomposition temperature</b>		No data available
<b>Kinematic viscosity</b>		No data available
<b>Dynamic viscosity</b>		No data available

### Other information

<b>Explosive properties</b>	No information available.
<b>Oxidizing properties</b>	No information available.
<b>Softening point</b>	No information available

<b>Molecular weight</b>	No information available
<b>VOC content</b>	No information available
<b>Liquid Density</b>	No information available
<b>Bulk density</b>	1.16 g/cm <sup>3</sup> @ 24°C

## 10. Stability and reactivity

<b>Reactivity</b>	None under normal use conditions.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Conditions to avoid</b>	Incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	None known based on information supplied.

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	Specific test data for the substance or mixture is not available. Fatal if inhaled. (based on components).
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Causes mild skin irritation.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components).

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Symptoms</b>	Coughing and/ or wheezing. Difficulty in breathing. Redness. Burning. May cause blindness. Prolonged contact may cause redness and irritation.
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<b><u>Acute toxicity</u></b>	Fatal if inhaled. Harmful if swallowed.
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#### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

<b>ATEmix (oral)</b>	1,902.80 mg/kg
<b>ATEmix (dermal)</b>	> 5,000 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	0.306 mg/l

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Glyphosate isopropylamine salt 38641-94-0	= 10537 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	> 1.3 mg/L ( Rat ) 4 h
Amines, tallow alkyl, ethoxylated	= 500 mg/kg ( Rat )	-	-

61791-26-2			
Isopropylamine 75-31-0	= 111 mg/kg ( Rat )	= 382 mg/kg ( Rat )	= 8.7 mg/L ( Rat ) 4 h

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. Causes mild skin irritation.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Causes burns. Causes serious eye damage.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Glyphosate isopropylamine salt 38641-94-0	-	Group 2A	-	X

**Legend****IARC (International Agency for Research on Cancer)**

Group 2A - Probably Carcinogenic to Humans

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

**12. Ecological information**

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Glyphosate isopropylamine salt 38641-94-0	-	LC50: =2.3mg/L (96h, Pimephales promelas) LC50: =8.3mg/L (96h, Oncorhynchus mykiss) LC50: =5.6mg/L (96h, Lepomis macrochirus)	-	EC50: 2.6 - 3.4mg/L (48h, Daphnia magna)
Isopropylamine 75-31-0	EC50: =4.13mg/L (72h, Desmodesmus subspicatus) EC50: =1.2mg/L (96h, Desmodesmus subspicatus) EC50: =62.5mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =310mg/L (96h, Pimephales promelas)	-	EC50: =20.8mg/L (48h, Daphnia magna)

**Persistence and degradability** No information available.

**Bioaccumulation****Component Information**

Chemical name	Partition coefficient
Isopropylamine 75-31-0	-0.5

**Mobility** No information available.

**Other adverse effects** No information available.

**13. Disposal considerations****Disposal methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**14. Transport information**

**TDG** Not regulated

**IATA** Not regulated in quantities less than 5 liter per individual container. See IATA SP A197

**UN number or ID number** UN3082

**UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s.

**Transport hazard class(es)** 9

**Packing group** III

**IATA Technical Name** Glyphosate isopropylamine salt

**Description** UN3082, Environmentally hazardous substance, liquid, n.o.s. (Glyphosate isopropylamine salt), 9, III

**Special Provisions** A97, A158, A197

**ERG Code** 9L

**IMDG** Not regulated in quantities less than 5 liter per individual container. See IMDG 2.10.2.7

**UN number or ID number** UN3082

**UN proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

**Transport hazard class(es)** 9

**Packing group** III

**IMDG Technical Name** Glyphosate isopropylamine salt

**Marine pollutant** P

**Marine pollutant** Glyphosate isopropylamine salt

**Description** UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Glyphosate isopropylamine salt), 9, III, Marine pollutant

**Special Provisions** 274, 335, 969

**EmS-No.** F-A, S-F

**15. Regulatory information****Safety, health and environmental regulations/legislation specific for the substance or mixture****International Regulations**

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable



**The Rotterdam Convention** Not applicable

**International Inventories**

Contact supplier for inventory compliance status

## 16. Other information

<b>NFPA</b>	<b>Health hazards</b> 4	<b>Flammability</b> 2	<b>Instability</b> 0	<b>Special hazards</b> -
<b>HMIS</b>	<b>Health hazards</b> 3*	<b>Flammability</b> 2	<b>Physical hazards</b> 0	<b>Personal protection</b> X

**Key or legend to abbreviations and acronyms used in the safety data sheet**

**Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

**Key literature references and sources for data used to compile the SDS**

U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGl(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

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**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**