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)

Issuing Date 07-Sep-2022 **Revision Date** 10-Jul-2023 **Revision Number** 1.01

1. Identification

Product identifier

Product Name FBN Pinox

Other means of identification

Product Code(s) PMRA Reg. No.: 34783

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

Flammable liquids	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1A
Carcinogenicity	Category 1B
Reproductive toxicity	Category 2
Aspiration hazard	Category 1

Label elements

Danger

Hazard statements
Combustible liquid
Causes skin irritation

Causes serious eye irritation
May cause an allergic skin reaction
May cause cancer
Suspected of damaging fertility or the unborn child
May be fatal if swallowed and enters airways

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
Avoid breathing dust, fume, gas, mist, vapors and spray
Contaminated work clothing should not be allowed out of the workplace
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

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
If eye irritation persists: Get medical advice and attention
Skin
IF ON SKIN: Wash with plenty of water and soap
Take off contaminated clothing and wash it before reuse
If skin irritation or rash occurs: Get medical advice and attention
Ingestion
IF SWALLOWED: Immediately call a POISON CENTER or doctor
Do NOT induce vomiting
Fire
In case of fire: Use dry chemical, CO_2, water spray or regular foam to extinguish

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place

Precautionary Statements - Disposal
Dispose of contents and container to an approved waste disposal plant

Other information
May be harmful if swallowed. May be harmful in contact with skin. May be harmful if inhaled. Toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

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)

Hexylene glycol	107-41-5	20 - 30	-	
Solvent Naphtha (Petroleum), Heavy Aromatic	64742-94-5	10 - 20	-	
Pinoxaden	243973-20-8	5 - 10	-	
Cloquintocet-mexyl	99607-70-2	1 - 5	-	
Naphthalene	91-20-3	1 - 5	-	
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts	84989-14-0	0.5 - < 1	-	
Isobutyl alcohol	78-83-1	0.1 - 0.5	-	

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention. Immediate medical attention is required.

Inhalation Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical attention. Delayed pulmonary edema may occur.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.

Ingestion ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. May cause redness and tearing of the eyes. Burning sensation.

Effects of Exposure No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically. Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.

5. Fire-fighting measures

Suitable Extinguishing Media Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing media None known based on information supplied.

Specific hazards arising from the chemical Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Product is or contains a sensitizer. May cause sensitization by skin contact.

Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge Yes.

Special protective equipment and precautions for fire-fighters 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

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak.

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

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use with local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. 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 away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up. Keep out of the reach of children. Store away from other materials.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	Alberta	British Columbia	Ontario	Quebec

Hexylene glycol 107-41-5	Ceiling: 25 ppm Ceiling: 121 mg/m³	Ceiling: 25 ppm	TWA: 25 ppm STEL: 50 ppm STEL: 10 mg/m³	Ceiling: 25 ppm Ceiling: 121 mg/m³
Naphthalene 91-20-3	TWA: 10 ppm TWA: 52 mg/m³ STEL: 15 ppm STEL: 79 mg/m³ Skin	TWA: 10 ppm Skin	TWA: 10 ppm Skin	TWA: 10 ppm Skin
Isobutyl alcohol 78-83-1	TWA: 50 ppm TWA: 152 mg/m³	TWA: 50 ppm	TWA: 50 ppm	TWA: 50 ppm TWA: 152 mg/m³

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
Hexylene glycol	TWA: 25 ppm STEL: 50 ppm STEL: 10 mg/m³	Ceiling: 25 ppm	TWA: 25 ppm STEL: 50 ppm STEL: 10 mg/m³	TWA: 25 ppm STEL: 50 ppm STEL: 10 mg/m³
Naphthalene	TWA: 10 ppm Skin	TWA: 10 ppm Skin	TWA: 10 ppm Skin	TWA: 10 ppm Skin
Isobutyl alcohol	TWA: 50 ppm	TWA: 50 ppm	TWA: 50 ppm	TWA: 50 ppm

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
Hexylene glycol	Ceiling: 25 ppm	TWA: 25 ppm STEL: 50 ppm STEL: 10 mg/m³	Ceiling: 25 ppm	
Naphthalene	TWA: 10 ppm STEL: 15 ppm Skin	TWA: 10 ppm	TWA: 10 ppm STEL: 15 ppm Skin	TWA: 10 ppm TWA: 50 mg/m³ STEL: 15 ppm STEL: 75 mg/m³
Isobutyl alcohol	TWA: 50 ppm STEL: 60 ppm	TWA: 50 ppm	TWA: 50 ppm STEL: 60 ppm	TWA: 50 ppm TWA: 150 mg/m³ STEL: 75 ppm STEL: 225 mg/m³

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained. Prevent product from entering drains. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways.

General hygiene considerations Do not eat, drink or smoke when using this product. 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. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	
Physical state	Liquid
Color	Light yellow
Odor	Characteristic
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
pH	4.46	@ 25 °C
Melting point / freezing point		No data available
Initial boiling point and boiling range		No data available
Flash point	70 °C / 158 °F	
Evaporation rate		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Vapor pressure		No data available
Relative vapor density		No data available
Relative density		No data available
Water solubility		No data available
Solubility in other solvents		No data available
Partition coefficient		No data available
Autoignition temperature		No data available
Decomposition temperature		No data available
Kinematic viscosity		No data available
Dynamic viscosity	12.5 - 13.4 mPa s @40°C	

Other information

Explosive properties	None.
Oxidizing properties	None.
Softening point	No information available
Molecular weight	No information available
VOC content	No information available
Liquid Density	1.03 g/mL @ 20◦C
Bulk density	No information available

10. Stability and reactivity

Reactivity None under normal use conditions.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Heat, flames and sparks.

Incompatible materials Strong acids, Strong bases, Strong oxidizing agents.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract. May be harmful if inhaled.

Eye contact Specific test data for the substance or mixture is not available. May cause irritation. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.

Skin contact May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Repeated exposure may cause skin dryness or cracking. Causes skin irritation.

Ingestion Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Redness. May cause redness and tearing of the eyes.

Acute toxicity .

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Hexylene glycol 107-41-5	= 3700 mg/kg (Rat)	= 12300 mg/kg (Rabbit)	-
Solvent Naphtha (Petroleum), Heavy Aromatic 64742-94-5	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 4688 mg/m³ (Vapor) 4h
Pinoxaden 243973-20-8	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	= 5.22 mg/L (Rat) 4 h
Cloquintocet-mexyl 99607-70-2	-	> 2000 mg/kg (Rat)	> 935 mg/m³ (Rat) 4 h
Naphthalene 91-20-3	= 1110 mg/kg (Rat)	= 1120 mg/kg (Rabbit)	> 0.4 mg/L (Rat) 4 h
Isobutyl alcohol 78-83-1	= 2460 mg/kg (Rat)	= 3400 mg/kg (Rabbit)	> 18.18 mg/L (Rat) 6 h

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

Skin corrosion/irritation Classification based on data available for ingredients. Causes skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity No information available.

Carcinogenicity 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
Naphthalene 91-20-3	A3	Group 2B	Reasonably Anticipated	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
NTP (National Toxicology Program)
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive toxicity Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. Suspected of damaging fertility or the unborn child.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target organ effects Liver. Kidney. Respiratory system. Eyes. Skin. Central nervous system. Blood.

Aspiration hazard May be fatal if swallowed and enters airways.

12. Ecological information

Ecotoxicity Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hexylene glycol 107-41-5	-	LC50: 10500 - 11000mg/L (96h, Pimephales promelas) LC50: =10000mg/L (96h, Lepomis macrochirus) LC50: =8690mg/L (96h, Pimephales promelas) LC50: =10700mg/L (96h, Pimephales promelas)	-	EC50: 2700 - 3700mg/L (48h, Daphnia magna)
Solvent Naphtha (Petroleum), Heavy Aromatic 64742-94-5	-	LC50: =19mg/L (96h, Pimephales promelas) LC50: =2.34mg/L (96h, Oncorhynchus mykiss) LC50: =1740mg/L (96h, Lepomis macrochirus) LC50: =45mg/L (96h, Pimephales promelas) LC50: =41mg/L (96h, Pimephales promelas)	-	EC50: =0.95mg/L (48h, Daphnia magna)
Naphthalene 91-20-3	-	LC50: 5.74 - 6.44mg/L (96h, Pimephales promelas) LC50: =1.6mg/L (96h,	-	LC50: =2.16mg/L (48h, Daphnia magna) EC50: =1.96mg/L (48h, Daphnia magna)

		Oncorhynchus mykiss) LC50: 0.91 - 2.82mg/L (96h, Oncorhynchus mykiss) LC50: =1.99mg/L (96h, Pimephales promelas) LC50: =31.0265mg/L (96h, Lepomis macrochirus)		EC50: 1.09 - 3.4mg/L (48h, Daphnia magna)
Isobutyl alcohol 78-83-1	-	LC50: =375mg/L (96h, Pimephales promelas) LC50: 1370 - 1670mg/L (96h, Pimephales promelas) LC50: 1480 - 1730mg/L (96h, Lepomis macrochirus) LC50: 1120 - 1520mg/L (96h, Oncorhynchus mykiss)	-	EC50: =1300mg/L (48h, Daphnia magna) EC50: 1070 - 1933mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Hexylene glycol 107-41-5	0.14
Solvent Naphtha (Petroleum), Heavy Aromatic 64742-94-5	6.5
Cloquintocet-mexyl 99607-70-2	5.24
Naphthalene 91-20-3	3.4
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts 84989-14-0	6
Isobutyl alcohol 78-83-1	1

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 / Non-Hazardous

Shipment by ground via highway or rail is not regulated as a dangerous good as long as the

packaging meets all TDG requirements.

*No marks, labels, placards or shipping papers apply per TDG 1.45.1, but may be used to facilitate multi-modal transport involving ICAO (IATA) or IMO

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	Solvent Naphtha (Petroleum), Heavy Aromatic, Pinoxaden
Description	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Solvent Naphtha (Petroleum), Heavy Aromatic, Pinoxaden), 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	Solvent Naphtha (Petroleum), Heavy Aromatic, Pinoxaden
Marine pollutant	P
Marine pollutant	Solvent Naphtha (Petroleum), Heavy Aromatic, Pinoxaden
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Solvent Naphtha (Petroleum), Heavy Aromatic, Pinoxaden), 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

NFPA	**Health hazards** 2	**Flammability** 2	**Instability** 0	**Special hazards** -
HMIS	**Health hazards** 2 *	**Flammability** 2	**Physical hazards** 0	**Personal protection** X

Chronic Hazard Star Legend ** = Chronic Health Hazard*

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