

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/19/2024	50001088	Date of first issue: 03/19/2024

SECTION 1. IDENTIFICATION

Product identifier

Product name Perimeter® II Herbicide

Other means of identification

Product code 50001088

Chemical nature Mixture

Product Registration Number PCP #30094

Recommended use of the chemical and restrictions on use

Recommended use Herbicide

Restrictions on use Use as recommended by the label.

Details of the supplier of the safety data sheet

Manufacturer

FMC Corporation
2929 WALNUT ST
PHILADELPHIA PA 19104
USA
Phone (AgHotline): 1-833-FMC-PPAC (1-833-362-7722),
Web: <https://ag.fmc.com/ca/en>
SDS-Info@fmc.com

Supplier Address

FMC of Canada Limited
6755 Mississauga Road, Suite 204
Mississauga, ON L5N 7Y2
Canada

Emergency telephone

For leak, fire, spill or accident emergencies, call:
1 800 / 424-9300 (CHEMTREC - U.S.A.)
1 703 / 741-5970 (CHEMTREC - International)
1 703 / 527-3887 (CHEMTREC - Alternate)

Medical emergency:
U.S.A. & Canada: +1 800 / 331-3148
All other countries: +1 651 / 632-6793 (Collect)

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

Eye irritation : Category 2A

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version 1.0 Revision Date: 03/19/2024 SDS Number: 50001088 Date of last issue: -
Date of first issue: 03/19/2024

Skin sensitization : Category 1

Reproductive toxicity : Category 1B

GHS label elements

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H360 May damage fertility or the unborn child.

Precautionary Statements :

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing mist or vapors.
P264 Wash skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

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

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version 1.0 Revision Date: 03/19/2024 SDS Number: 50001088 Date of last issue: -
Date of first issue: 03/19/2024

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture
Chemical nature : Mixture

Components

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
fluroxypyr-meptyl (ISO)	fluroxypyr-meptyl (ISO)	81406-37-3	45.52
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified	Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified	64742-94-5	$\geq 1 - < 5$ *
N-methyl-2-pyrrolidone	N-methyl-2-pyrrolidone	872-50-4	$\geq 0.1 - < 1$ *

* Actual concentration or concentration range is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : Move to fresh air.
If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : Take off all contaminated clothing immediately.
Wash contaminated clothing before re-use.
Wash off immediately with plenty of water for at least 15 minutes.
Get medical attention if irritation develops and persists.

In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Do not induce vomiting without medical advice.
Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

Most important symptoms and effects, both acute and : May cause an allergic skin reaction.
Causes serious eye irritation.

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/19/2024	50001088	Date of first issue: 03/19/2024

delayed : May damage fertility or the unborn child.

Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing. Avoid inhalation, ingestion and contact with skin and eyes. If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Dry chemical, CO₂, water spray or regular foam.

Unsuitable extinguishing media : High volume water jet

Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Fluorinated compounds
Nitrogen oxides (NO_x)
Carbon oxides
Fire may produce irritating, corrosive and/or toxic gases.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for fire-fighters : Firefighters should wear protective clothing and self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Never return spills in original containers for re-use.
Mark the contaminated area with signs and prevent access to unauthorized personnel.
Only qualified personnel equipped with suitable protective equipment may intervene.
For disposal considerations see section 13.

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version 1.0 Revision Date: 03/19/2024 SDS Number: 50001088 Date of last issue: -
Date of first issue: 03/19/2024

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : Do not breathe vapors/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.
Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : Do not store near acids.
- Further information on storage stability : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified	64742-94-5	TWA	200 mg/m ³ (total hydrocarbon vapor)	CA AB OEL
		TWA	200 mg/m ³ (total hydrocarbon vapor)	ACGIH
N-methyl-2-pyrrolidone	872-50-4	TWA	400 mg/m ³	CA ON OEL

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
N-methyl-2-pyrrolidone	872-50-4	5-Hydroxy-N-methyl-2-	Urine	End of shift (As)	100 mg/l	ACGIH BEI

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version 1.0 Revision Date: 03/19/2024 SDS Number: 50001088 Date of last issue: -
Date of first issue: 03/19/2024

		pyrrolidone		soon as possible after exposure ceases)		
--	--	-------------	--	---	--	--

Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
- Hand protection
Material : Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.
- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.
- Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Protective measures : Plan first aid action before beginning work with this product. Always have on hand a first-aid kit, together with proper instructions.
Ensure that eye flushing systems and safety showers are located close to the working place.
Wear suitable protective equipment.
In the context of professional plant protection use as recommended, the end user must refer to the label and the instructions for use.
- Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state : liquid
- Color : yellow
- Odor : pleasant
- Odor Threshold : No data available

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/19/2024	50001088	Date of first issue: 03/19/2024

pH	:	4.58 Concentration: 1 %
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	No data available
Flash point	:	> 100 °C Method: closed cup
Evaporation rate	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	1.05
Density	:	1.05 g/cm ³ (20 °C) Method: OECD Test Guideline 109
Bulk density	:	No data available
Solubility(ies)	:	
Water solubility	:	emulsifiable
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	358 °C Method: Regulation (EC) No. 440/2008, Annex, A.15
Decomposition temperature	:	No data available
Viscosity	:	
Viscosity, dynamic	:	28.2 mPa.s (40 °C) Method: OECD Test Guideline 114
Viscosity, kinematic	:	No data available
Explosive properties	:	Method: Directive 67/548/EEC, Annex V, A.14

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/19/2024	50001088	Date of first issue: 03/19/2024

	Not explosive
Oxidizing properties	: No data available
Surface tension	: 32 mN/m, 25 °C, Regulation (EC) No. 440/2008, Annex, A.5

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: Avoid extreme temperatures. Protect from frost, heat and sunlight.
Incompatible materials	: Avoid strong acids, bases, and oxidizers.
Hazardous decomposition products	: No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Based on available data, the classification criteria are not met.

Product:

Acute oral toxicity	: LD50 Oral (Rat, female): > 5,000 mg/kg
Acute inhalation toxicity	: LC50 (Rat, male and female): > 5.5 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	: LD50 Dermal (Rat, male and female): > 5,000 mg/kg

Components:

fluroxypyr-meptyl (ISO):

Acute oral toxicity	: LD50 (Rat): 5,000 mg/kg
Acute inhalation toxicity	: LC50 (Rat): > 1 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	: LD50 (Rat): > 2,000 mg/kg

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version 1.0 Revision Date: 03/19/2024 SDS Number: 50001088 Date of last issue: -
Date of first issue: 03/19/2024

Method: OECD Test Guideline 402

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

- Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 401
Remarks: Based on data from similar materials
- Acute inhalation toxicity : LC50 (Rat): > 4.688 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Assessment: The substance or mixture has no acute inhalation toxicity
- Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

N-methyl-2-pyrrolidone:

- Acute oral toxicity : LD50 (Rat): 4,150 mg/kg
Method: OECD Test Guideline 401
- Acute inhalation toxicity : LC0 (Rat): > 5.1 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity
- Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 402

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Product:

- Assessment : Not classified as irritant
Result : slight or no skin irritation.

Components:

fluroxypyr-meptyl (ISO):

- Species : Rabbit
Assessment : Not classified as irritant
Result : No skin irritation

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

- Species : Rabbit
Assessment : Repeated exposure may cause skin dryness or cracking.
Result : No skin irritation
Remarks : Minimal effects that do not meet the threshold for classifica-

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/19/2024	50001088	Date of first issue: 03/19/2024

tion.
Based on data from similar materials

N-methyl-2-pyrrolidone:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	irritating

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Result	:	Moderate eye irritation
Assessment	:	Not classified as irritant

Components:

fluroxypyr-meptyl (ISO):

Species	:	Rabbit
Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405
Remarks	:	Minimal effects that do not meet the threshold for classification.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Species	:	Rabbit
Assessment	:	No eye irritation
Remarks	:	Minimal effects that do not meet the threshold for classification. Based on data from similar materials

N-methyl-2-pyrrolidone:

Species	:	Rabbit
Result	:	irritating
Method	:	OECD Test Guideline 405

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Based on available data, the classification criteria are not met.

Product:

Species	:	mice
Result	:	May cause sensitization by skin contact.

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version 1.0 Revision Date: 03/19/2024 SDS Number: 50001088 Date of last issue: -
Date of first issue: 03/19/2024

Components:

fluroxypyr-meptyl (ISO):

Species : Guinea pig
Method : OECD Test Guideline 406
Result : Does not cause skin sensitization.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Test Type : Maximization Test
Species : Guinea pig
Result : Not a skin sensitizer.
Remarks : Based on data from similar materials

N-methyl-2-pyrrolidone:

Method : OECD Test Guideline 429
Result : Not a skin sensitizer.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Components:

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Genotoxicity in vitro : Test Type: reverse mutation assay
Method: OECD Test Guideline 471
Result: negative
Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Bone marrow chromosome aberration.
Species: Rat
Application Route: inhalation (vapor)
Result: negative

N-methyl-2-pyrrolidone:

Genotoxicity in vitro : Test Type: Ames test
Method: OECD Test Guideline 471
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative

Test Type: unscheduled DNA synthesis assay
Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse
Method: OECD Test Guideline 474
Result: negative

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version 1.0 Revision Date: 03/19/2024 SDS Number: 50001088 Date of last issue: -
Date of first issue: 03/19/2024

Carcinogenicity

Based on available data, the classification criteria are not met.

Components:

fluroxypyr-meptyl (ISO):

Species : Rat
Method : OECD Test Guideline 451
Result : negative

Species : Mouse
Method : OECD Test Guideline 453
Result : negative

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Species : Rat, male and female
Application Route : inhalation (vapor)
Exposure time : 12 month(s)
NOAEC : 1.8 mg/l
Result : negative
Remarks : Based on data from similar materials

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

N-methyl-2-pyrrolidone:

Species : Rat, male and female
Application Route : Oral
NOAEL : 207 - 283 mg/kg bw/day
Result : negative

Species : Rat, male
Application Route : Inhalation
NOAEC : 0.04 mg/l
Result : negative

Species : Mouse, male
Application Route : Oral
NOAEL : 89 mg/kg body weight
Method : OECD Test Guideline 451
Result : negative

Reproductive toxicity

May damage fertility or the unborn child.

Components:

fluroxypyr-meptyl (ISO):

Effects on fertility : Method: OECD Test Guideline 416
Result: negative

Effects on fetal development : Method: OECD Test Guideline 414

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/19/2024	50001088	Date of first issue: 03/19/2024

Result: negative

N-methyl-2-pyrrolidone:

Effects on fertility : Test Type: Two-generation study
Species: Rat, male and female
Application Route: Oral
Method: OECD Test Guideline 416
Result: positive

Effects on fetal development : Test Type: Pre-natal
Species: Rat
Application Route: Oral
Method: OECD Test Guideline 414
Result: positive

Reproductive toxicity - Assessment : Clear evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments

STOT-single exposure

Based on available data, the classification criteria are not met.

Components:

N-methyl-2-pyrrolidone:

Assessment : May cause respiratory irritation.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Repeated dose toxicity

Components:

fluroxypyr-meptyl (ISO):

Species : Rat
NOAEL : 80 mg/kg
Exposure time : 90 d
Method : OECD Test Guideline 408
Target Organs : Kidney

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Species : Rat, male and female
NOAEL : 0.9 - 1.8 mg/l
Application Route : inhalation (vapor)
Exposure time : 12 Months

N-methyl-2-pyrrolidone:

Species : Rat, male
NOAEL : 169 mg/kg
Application Route : Oral

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/19/2024	50001088	Date of first issue: 03/19/2024

Species : Mouse, male
NOAEL : 89 mg/kg
Application Route : Oral
Method : OECD Test Guideline 408
Target Organs : Liver

Species : Rabbit
NOAEL : 826 mg/kg
Application Route : Dermal

Species : Rat, male
: 3 mg/l
Application Route : inhalation (vapor)
Target Organs : Testes

Aspiration toxicity

Based on available data, the classification criteria are not met.

Components:

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

May be fatal if swallowed and enters airways.

Experience with human exposure

Components:

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Skin contact : Symptoms: Repeated exposure may cause skin dryness or cracking.

Further information

Product:

Remarks : No data available

Components:

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Remarks : Vapour concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects. Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/19/2024	50001088	Date of first issue: 03/19/2024

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

fluroxypyr-meptyl (ISO):

- Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): > 0.63 mg/l
Exposure time: 96 h
- LC50 (Oncorhynchus mykiss (rainbow trout)): > 0.2 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 0.183 mg/l
Exposure time: 48 h
- Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): > 1.41 mg/l
Exposure time: 72 h
- LC50 (Scenedesmus subspicatus): > 0.5 mg/l
Exposure time: 72 h
- Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 0.2 mg/l
Exposure time: 21 d
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.06 mg/l
Exposure time: 21 d
- Toxicity to soil dwelling organisms : LC50 (Eisenia fetida (earthworms)): > 1,000 mg/kg
Exposure time: 14 d
- Toxicity to terrestrial organisms : LD50 (Anas platyrhynchos (Mallard duck)): > 2,000 mg/kg
- LD50 (Colinus virginianus (Bobwhite quail)): > 2,000 mg/kg
- LD50 (Apis mellifera (bees)): > 100 µg/bee
Exposure time: 48 h
End point: Acute oral toxicity
- LD50 (Apis mellifera (bees)): > 100 µg/bee
Exposure time: 48 h
End point: Acute contact toxicity

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

- Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 2 - 5 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 1.4 mg/l
Exposure time: 48 h

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/19/2024	50001088	Date of first issue: 03/19/2024

Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EL50 (Pseudokirchneriella subcapitata (green algae)): 1 - 3 mg/l
Exposure time: 24 h
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EL50 (Daphnia magna (Water flea)): 0.89 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211

Toxicity to microorganisms : LL50 (Tetrahymena pyriformis): 677.9 mg/l
Exposure time: 72 h
Test Type: Growth inhibition

N-methyl-2-pyrrolidone:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 500 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1,000 mg/l
Exposure time: 24 h

LC50 (Palaeomonetes vulgaris (Grass shrimp)): 1,107 mg/l
Exposure time: 96 h

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 600.5 mg/l
Exposure time: 72 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 12.5 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211

Toxicity to microorganisms : EC50 (activated sludge): 100 mg/l
Exposure time: 48 h

EC50 (activated sludge): > 600 mg/l
Exposure time: 30 min

Persistence and degradability

Components:

fluroxypyr-meptyl (ISO):

Biodegradability : Remarks: Not readily biodegradable.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 58.6 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
Remarks: Based on data from similar materials

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/19/2024	50001088	Date of first issue: 03/19/2024

N-methyl-2-pyrrolidone:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 73 %
Exposure time: 28 d

Bioaccumulative potential

Components:

fluroxypyr-meptyl (ISO):

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: 4.5 (25 °C)

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Bioaccumulation : Remarks: The product/substance has a potential to bioaccumulate.

Partition coefficient: n-octanol/water : log Pow: 3.72
Method: QSAR

N-methyl-2-pyrrolidone:

Partition coefficient: n-octanol/water : log Pow: -0.46 (25 °C)

Mobility in soil

Components:

fluroxypyr-meptyl (ISO):

Distribution among environmental compartments : Remarks: The product is not expected to be mobile in soils.

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:

Distribution among environmental compartments : Remarks: Expected to partition to sediment and wastewater solids. Moderately volatile.

Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/19/2024	50001088	Date of first issue: 03/19/2024

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

- Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

- UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Fluroxypyr-meptyl)
Class : 9
Packing group : III
Labels : 9
Environmentally hazardous : yes

IATA-DGR

- UN/ID No. : UN 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
(Fluroxypyr-meptyl)
Class : 9
Packing group : III
Labels : Miscellaneous
Packing instruction (cargo aircraft) : 964
Packing instruction (passenger aircraft) : 964
Environmentally hazardous : yes

IMDG-Code

- UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Fluroxypyr-meptyl)
Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version 1.0 Revision Date: 03/19/2024 SDS Number: 50001088 Date of last issue: -
Date of first issue: 03/19/2024

Domestic regulation

TDG

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fluroxypyr-meptyl)
Class : 9
Packing group : III
Labels : 9
ERG Code : 171
Marine pollutant : yes(Fluroxypyr-meptyl)

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

NPRI Components : Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified
N-methyl-2-pyrrolidone

The ingredients of this product are reported in the following inventories:

TCSI : Not in compliance with the inventory
TSCA : Product contains substance(s) not listed on TSCA inventory.
AIIC : Not in compliance with the inventory
DSL : This product contains the following components that are not on the Canadian DSL nor NDSL.

INERT INGREDIENTS (NULL)

fluroxypyr-meptyl (ISO)

ENCS : Not in compliance with the inventory
ISHL : Not in compliance with the inventory
KECI : Not in compliance with the inventory
PICCS : Not in compliance with the inventory
IECSC : Not in compliance with the inventory
NZIoC : Not in compliance with the inventory
TECI : Not in compliance with the inventory

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/19/2024	50001088	Date of first issue: 03/19/2024

Canadian lists

No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	:	ACGIH - Biological Exposure Indices (BEI)
CA AB OEL	:	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA ON OEL	:	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.
ACGIH / TWA	:	8-hour, time-weighted average
CA AB OEL / TWA	:	8-hour Occupational exposure limit
CA ON OEL / TWA	:	Time-Weighted Average Limit (TWA)

AIIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Disclaimer

SAFETY DATA SHEET

according to the Hazardous Products Regulations



Perimeter® II Herbicide

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	03/19/2024	50001088	Date of first issue: 03/19/2024

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. You can contact FMC Corporation to insure that this document is the most current available from FMC Corporation. No warranty of fitness for any particular purpose, warranty of merchantability or any other warranty, expressed or implied, is made concerning the information provided herein. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. The user is responsible for determining whether the product is fit for a particular purpose and suitable for the user's conditions and methods of use. Since the conditions and methods of use are beyond the control of FMC Corporation, FMC Corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

CA / EN

Prepared by:

FMC Corporation

FMC and the FMC Logo are trademarks of FMC Corporation and/or an affiliate.

© 2021-2024 FMC Corporation. All Rights Reserved.

End of Material Safety Data Sheet