



SAFETY DATA SHEET

Pyzero 100EC

SDS # : FO000918-A
Revision date: 2018-08-10
Format: AP
Version 3

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name Pyzero 100EC

Product Code(s) FO000918-A

Synonyms METAMIFOP:
(R)-2-[4-(6-chloro-1,3-benzoxazol-2-yloxy)phenoxy]-2'-fluoro-N-methylpropionanilide
(IUPAC name);
(2R)-2-[4-[(6-chloro-2-benzoxazolyl)oxy]phenoxy]-N-(2-fluorophenyl)-N-methylpropanamide
(CAS name)

Active Ingredient(s) Metamifop

Recommended Use: Herbicide.

Restrictions on Use: Use as recommended by the label.

Manufacturer/Supplier
FMC Corporation
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Philadelphia, PA 19104
(215) 299-6000 (General Information)
msdsinfo@fmc.com (E-Mail General Information)

Telephone: 86 21 20675888
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Emergency telephone 86 532 8388 9090

Section 2: HAZARDS IDENTIFICATION

GHS - Classification

Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1B
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2
Flammable liquids	Category 4

Label Elements



Signal Word

WARNING

Hazard Statements

H319 - Causes serious eye irritation
 H317 - May cause an allergic skin reaction
 H411 - Toxic to aquatic life with long lasting effects
 H227 - Combustible liquid

Precautionary Statements - Prevention

P281 - Use personal protective equipment as required
 P271 - Use only outdoors or in a well-ventilated area
 P264 - Wash face, hands and any exposed skin thoroughly after handling
 P273 - Avoid release to the environment
 P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

P321 - Specific treatment (see supplemental first aid instructions on this label)
 P370+P378: In case of fire, use foam or carbon dioxide for extinction.
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P337 + P313 - If eye irritation persists: Get medical advice/ attention
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
 P362 + P364 - Take off all contaminated clothing and wash it before reuse
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P337 + P313 - If eye irritation persists: Get medical advice/ attention
 P331 - Do NOT induce vomiting
 In case of fire: Use CO₂, dry chemical, or foam for extinction
 P391 - Collect spillage

Precautionary Statements - Storage

P405 - Store locked up
 P403 + P235 - Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

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

Other Information

May be fatal if swallowed and enters airways

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms METAMIFOP: (R)-2-[4-(6-chloro-1,3-benzoxazol-2-yloxy)phenoxy]-2'-fluoro-N-methylpropionanilide (IUPAC name);
 (2R)-2-[4-[(6-chloro-2-benzoxazolyl)oxy]phenoxy]-N-(2-fluorophenyl)-N-methylpropanamide (CAS name)

Chemical name	CAS-No	Weight %
Metamifop	256412-89-2	10
2-Ethylhexyl Acetate	103-09-3	5-15
Calcium dodecylbenzene sulfonate	26264-06-2	1-5
Ethoxylated Alcohol	68131-40-8	5-15
Acetophenone	98-86-2	5-10

Section 4: FIRST AID MEASURES

Inhalation

Move to fresh air. If person is not breathing, contact emergency medical services, then give artificial respiration, preferably mouth-to-mouth, if possible.

Skin Contact

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

Eye Contact

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison

control center or doctor for further treatment advice.

Ingestion

Call a physician or poison control center immediately. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

None known.

Protection of first-aiders

Use personal protective equipment. See Section 8 for more detail.

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, carbon dioxide, water spray or regular foam.

Unsuitable extinguishing media

No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions

Isolate and post spill area. Remove all sources of ignition. Wear protective gloves/clothing and eye/face protection. For personal protection see section 8.

Other

For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

Environmental Precautions

Keep material out of lakes, streams, ponds, and sewer drains. Keep people and animals away from and upwind of spill/leak. Keep out of waterways.

Methods for Containment

If appropriate, surface water drains should be covered. Minor spills on the floor or other impervious surface should immediately be swept up or preferably vacuumed up using equipment with high efficiency final filter. Transfer to suitable containers. Clean area with detergent and much water. Absorb wash liquid onto inert absorbent such as universal binder, Fuller's earth, bentonite or other absorbent clay and collect in suitable containers. The used containers should be properly closed and labelled.

Methods for cleaning up

Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Pick up and transfer to properly labeled containers.

Section 7: HANDLING AND STORAGE

Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use.

Storage

Keep in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep in properly labeled containers. Keep away from food, drink and animal feedingstuffs.

Materials to avoid

Strong oxidizing agents, Strong acids, Strong bases.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Engineering measures	Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.
<u>Personal protective equipment</u>	
Respiratory Protection	The product does not automatically present an airborne exposure concern during normal handling. In the event of an accidental discharge of the material which produces a heavy vapour or mist, workers should put on officially approved respiratory protection equipment with a universal filter type including particle filter.
Hand Protection	Wear chemical protective gloves made of materials such as nitrile or neoprene.
Eye/Face Protection	For dust, splash, mist or spray exposure, wear chemical protective goggles. Maintain eye wash fountain and quick-drench facilities in work area.
Skin and Body Protection	Wear protective gloves/clothing.
Hygiene measures	Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing separately from regular household laundry.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Light brown Liquid
Odor	Aromatic
Color	Light brown
Odor threshold	No information available
pH	No information available
Melting point/freezing point	No information available
Boiling Point/Range	No information available
Flash point	64 °C
Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific gravity	0.980 (20 degrees C)
Water solubility	No information available
Solubility(ies)	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Density	No information available
Bulk density	No information available

Section 10: STABILITY AND REACTIVITY

Reactivity	None under normal use conditions
Stability	Stable under recommended storage conditions
Hazardous reactions	None under normal processing.
Hazardous polymerization	Hazardous polymerization does not occur.

Conditions to Avoid Heat, flames and sparks.

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

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors.

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Numerical measures of toxicity - Product Information

LD50 Oral > 5,000 mg/kg
 LD50 Dermal > 2,000 mg/kg
 LC50 Inhalation > 2 mg/L

Skin corrosion/irritation Non-irritating.
 Serious eye damage/eye irritation Light to medium irritation.
 Sensitization Weakly sensitizing.

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

Mutagenicity Not mutagenic.
 Carcinogenicity Not carcinogenic.
 Reproductive toxicity No toxicity to reproduction in animal studies.
 Developmental toxicity Not teratogenic in animal studies.
 STOT - single exposure Not classified.
 STOT - repeated exposure Not classified.
 Chronic toxicity Avoid repeated exposure. Prolonged exposure may cause chronic effects.
 Neurological effects Not neurotoxic.
 Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Metamifop (256412-89-2)				
Active Ingredient(s)	Duration	Species	Value	Units
Metamifop	LD50	Bee	>100	µg/bee
	LC50	Earthworm	>1000	ppm
	LD50 Oral	Bobwhite quail	>2000	mg/kg
	96 h LC50	Rainbow trout	0.185	mg/L
	48 h EC50	Daphnia	0.288	mg/L

Persistence and degradability No information available.

Bioaccumulation Metamifop: The substance does not have a potential for bioconcentration.

Mobility No information available.

Other Adverse Effects No information available.

Section 13: DISPOSAL CONSIDERATIONS

Waste disposal methods	Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance. Proper personal protective equipment, as described in Sections 7 and 8, must be worn while handling materials for waste disposal.
Contaminated Packaging	Dispose of in accordance with local regulations.

Section 14: TRANSPORT INFORMATION

IMDG/IMO

UN/ID no	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s. Metamifop
Hazard class	9
Packing Group	III
EmS No.	F-A, S-F
Marine Pollutant	Yes

ICAO/IATA

UN/ID no	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s. Metamifop
Hazard class	9
Packing Group	III
Marine Pollutant	Yes

Section 15: REGULATORY INFORMATION

International Inventories

A food, food additive, drug, cosmetic, or device, when manufactured, processed or distributed in commerce for use as a food, food additive, drug, cosmetic, or device may not be subject to local notification requirements. Check local regulations for more information.

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
2-Ethylhexyl Acetate 103-09-3	X	X	X	X	X	X	X	X
Ethoxylated Alcohol 68131-40-8	X	X			X	X	X	X
Acetophenone 98-86-2	X	X	X	X	X	X	X	X

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Section 16: OTHER INFORMATION

Prepared By:

FMC Corporation

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End of Safety Data Sheet