

SAFETY DATA SHEET

Petoxamida Técnico

SDS #: 50000263
Revision date: 1/4/2021
Version 2
Format: BR



Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Petoxamida Técnico

Other means of identification

Product Code(s) 50000263, RM0006604-BR-A

UN/ID no UN3077

Synonyms PETHOXAMID: 2-Chloro-N-(2-ethoxyethyl)-N-(2-methyl-1-phenylprop-1-enyl)-acetamide (IUPAC name); 2-chloro-N-(2-ethoxyethyl)-N-(2-methyl-1-phenyl-1-propenyl)acetamide (CAS Name)

Active Ingredient(s) Pethoxamid

Formula $C_{16}H_{22}ClNO_2$ (Pethoxamid)

Chemical Family Amide

Recommended use of the chemical and restrictions on use

Recommended Use: Active ingredient for formulation of registered products.

Restrictions on Use: Use as recommended by the label.

Details of the supplier of the safety data sheet

Address: FMC Química do Brasil Ltda.
Avenida Dr. José Bonifácio Coutinho Nogueira,
150 - 1º andar - Jardim Madalena, Campinas/SP
(19) 2042-4500

Emergency telephone number: (34) 3319-3019 or 0800 34 35 450

Section 2: HAZARDS IDENTIFICATION

Classification according to ABNT-NBR 14725-3 in accordance with the Globally Harmonized System (GHS)

General Hazards

This material is considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 5
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin sensitization	Category 1
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

GHS Label elements, including precautionary statements



Signal Word: Warning

Hazard Statements

H317 - May cause an allergic skin reaction
H302 - Harmful if swallowed
H332 - Harmful if inhaled
H313 - May be harmful in contact with skin
H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements

Precautionary Statements - Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P271 - Use only outdoors or in a well-ventilated area
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves
P273 - Avoid release to the environment

Precautionary Statements - Response

P312 - Call a POISON CENTER or doctor if you feel unwell

IF ON SKIN

P302 + P352 - IF ON SKIN: Wash with plenty of water and soap
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
P362 + P364 - Take off all contaminated clothing and wash it before reuse

IF INHALED

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P312 - Call a POISON CENTER or doctor if you feel unwell

IF SWALLOWED

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
P330 - Rinse mouth
P391 - Collect spillage

Precautionary Statements - Disposal

P501 - Dispose of contents/container according to label directions

Other Information

The above risk classification charts have been identified for this product according to their respective hazard identification by interpreting Annex D, Tables D.1 to D.31 of ABNT - NBR 14725-3. The above safety information for this product has been based on the priority criteria given in ABNT - NBR 14725-3 annex B item B.3, sub item a), b) and c); prioritizing the risk of the highest hazard category.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/preparation Substance:

Chemical Family Amide

Hazardous Components

Chemical name	CAS-No	Weight %
Pethoxamid	106700-29-2	>94.5

* The exact percentage composition has been withheld as a trade secret.

Synonyms are provided in Section 1.

Section 4: FIRST AID MEASURES

FIRST AID MEASURES

General Advice	Do not induce vomiting or give anything by mouth to an unconscious person. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Bring the SDS, product label and package insert when seeking medical assistance.
Eye Contact	Rinse thoroughly with plenty of water, also under the eyelids. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Get medical attention immediately if symptoms occur.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a poison control center or doctor for further treatment advice.
Inhalation	Move to fresh air. If person is not breathing, contact emergency medical services, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
Ingestion	Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Immediate medical attention is required.
Protection of first-aiders	Avoid contact by using personal protective equipment. See Section 8 for more detail.

Most important symptoms and effects, both acute and delayed

Most important symptoms and effects, both acute and delayed	Allergic skin reactions. Non-specific signs of toxicity, such as lethargy, decreased respiratory rate, diarrhea, and tremors.
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Indication of any immediate medical attention and special treatment needed

Indication of immediate medical attention and special treatment needed, if necessary	Treat symptomatically.
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Section 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, Carbon dioxide (CO₂), Foam, Water spray.

Unsuitable extinguishing media

Do not spread material with high pressure water streams.

Specific extinguishing methods

Evacuate area and fight fire from a safe distance. Isolate fire area. Evaluate upwind. Very toxic to aquatic life with long lasting effects. Dike to prevent runoff.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

Specific Hazards Arising from the Chemical

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

Hazardous Combustion Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Nitrogen oxides (NOx). Hydrogen chloride. Carbon oxides (COx). and various chlorinated organic compounds.

Explosive properties

Sensitivity to Mechanical Impact No data available.

Sensitivity to Static Discharge Static electricity might be sufficient to ignite dust clouds. Possibility of ignition will depend on the minimum ignition energy (MIE) and the type of operations undertaken with the material. MIE values are not provided in this SDS.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Isolate and post spill area. Remove all sources of ignition. Ventilate the area. If ventilation is not possible wear full protection suit and chemical protective equipment. For personal protection see section 8.

For emergency responders Very toxic to aquatic life with long lasting effects. Dike to prevent runoff.

Environmental Precautions

Environmental Precautions Prevent product from entering drains. Avoid penetration into waterways, sewers, soil or groundwater. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained. Keep people and animals away from and upwind of spill/leak.

C. Methods and material for containment and cleaning up

Methods for Containment Stop leak and contain spill if this can be done safely. Dike to confine spill and absorb with non-combustible absorbent such as clay, sand or soil. Sweep up and shovel into suitable containers for disposal. Control runoff and isolate discharged material for proper disposal. .

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean and neutralize spill area, tools and equipment by washing with water and soap. Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13.

Section 7: HANDLING AND STORAGE

Precautions for Safe Handling

Handling Handle in accordance with good industrial hygiene and safety practice. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Avoid breathing dust. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of reach of children and animals. Keep away from food, drink and animal feedingstuffs. Keep/store only in original container. Keep in properly labeled containers.

Incompatible products None known.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region

specific regulatory bodies

Predicted No Effect Concentration (PNEC) 0.29 ug/l

Appropriate engineering controls

Engineering measures Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Chemical resistant goggles must be worn. Maintain eye wash fountain and quick-drench facilities in work area.

Skin and Body Protection Minimize skin contamination by following good industrial hygiene practices. Wear suitable protective clothing. Protective shoes or boots.

Hand Protection Wear protective gloves tested to relevant standards (e.g. Europe: EN374, US: F739, AS/NZA: 2161). Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity, and specific local conditions. Always seek advice from glove suppliers. Contaminated gloves should be replaced. For prolonged contact, gloves with at least 0.7 mm in thickness and breakthrough time of more than 480 minutes are recommended. For short-term contact, gloves with at least 0.4 mm in thickness and breakthrough time of more than 30 minutes are recommended. Recommended glove material includes butyl rubber, fluorocarbon rubber, nitrile rubber, chloroprene rubber or neoprene.

Respiratory Protection In case of insufficient ventilation wear suitable respiratory equipment.

Hygiene measures Clean water should be available for washing in case of eye or skin contamination. Remove and wash contaminated clothing before re-use. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Launder work clothing separately from regular household laundry.

General information If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Crystalline solid or viscous liquid, depending on temperature
Odor	Sweet
Color	Red brown
Odor threshold	No information available
pH	No information available
Melting point/freezing point	37-38 °C
Boiling Point/Range	Decomposes at temperatures above 200°C.
Flash point	182 °C
Evaporation Rate	No information available
Flammability (solid, gas)	Not highly flammable
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	3.5 x 10 ⁻⁴ Pa at 25°C
Vapor density	No information available
Specific gravity	No information available
Water solubility	0.401 g/kg
Solubility in other solvents	Ethyl acetate: 4291 g/kg, Heptane: 117 g/kg
Surface tension	53 mN/m
Partition coefficient	Log K _{ow} = 2.96 (at pH 5 and 20°C)
Autoignition temperature	299 °C
Decomposition temperature	Approx. 200 °C

Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Explosive properties	Not explosive
Corrosivity	No information available
Oxidizing properties	Non-oxidizing
Softening point	No information available
Molecular weight	No data available
VOC content (%)	No information available
Relative density	1.19
Bulk density	No information available
K _{st}	>0 bar m/s

Section 10: STABILITY AND REACTIVITY

Reactivity

None under normal use conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

None known.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Nitrogen oxides (NO_x). Hydrogen chloride. Carbon oxides (CO_x). and various chlorinated organic compounds.

Section 11: TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral : 983 mg/kg (rat) (Method: OECD 401)

LD50 Dermal : > 2000 mg/kg (rat) (Method: OECD 402)

LC50 Inhalation (dust) : > 4.16 mg/L 4 hr (rat) (Method: OECD 403)

Information on likely routes of exposure

Inhalation: There are no data available for this product

Eye Contact: May cause slight irritation

Skin Contact: May cause an allergic skin reaction

Ingestion: There are no data available for this product

Information on toxicological effects

Symptoms: May cause an allergic skin reaction. Non-specific signs of toxicity, such as lethargy, decreased respiratory rate, diarrhea, and tremors

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

Skin corrosion/irritation: Slightly irritating (Method: OECD 404)

Serious eye damage/eye irritation: Slightly irritating to eyes. (Method: OECD 405)

Sensitization: May cause sensitization by skin contact (Method: OECD 406)

Mutagenicity: PETHOXAMID: Positive in a chromosomal aberration test with human lymphocytes (OECD 473). Negative bacterial reverse mutation test (OECD 471) and In Vitro Mammalian Cell Gene Mutation assay (OECD 476). Based on available data, the classification criteria are not met

Carcinogenicity: Pethoxamid: Not carcinogenic (Method: OECD 453)

Reproductive toxicity: Pethoxamid: No adverse effects were observed on fertility (OECD 416).

STOT - repeated exposure: Liver, Thyroid

Developmental toxicity: Pethoxamid: No adverse effects were observed on development (OECD 414).

Target organ effects: Thyroid, liver

Neurological effects: No information available

Aspiration hazard: Not applicable

Section 12: ECOLOGICAL INFORMATION

Very toxic to aquatic life with long lasting effects.

Ecotoxicity

Duration	Species	Value	Units
96 h LC50	Fish	2.2	mg/L
28-day NOEC	Fish	1.1	mg/L
48 h EC50	Daphnia	23	mg/L
21 d NOEC	Daphnia	2.8	mg/L
72 h EC50	Algae	0.00195	mg/L
96 h EC50	Algae	9.4	mg/L
14-day EC50	Duckweed (Lemna minor)	0.0095	mg/L
14-day LD50	Earthworm	527	mg/kg Soil
LD50 Acute	Bee	>200	µg/bee
LD50 contact	Bee	>200	µg/bee

Persistence and degradability: Pethoxamid: Not readily biodegradable.

Bioaccumulation: Pethoxamid: Does not bioaccumulate.

Mobility: Pethoxamid. Moderately mobile:

Other Adverse Effects: See product label for additional application instructions relating to environmental precautions

Section 13: DISPOSAL CONSIDERATIONS

Waste disposal methods

Pesticide wastes are toxic. 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 containers and packages

Containers must be disposed of in accordance with local regulations. Refer to the product label for container disposal instructions. Do not reuse this container for any other purpose.

Section 14: TRANSPORT INFORMATION

IMDG/IMO:

UN/ID no	UN3077
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Pethoxamid)
Hazard class	9
Packing Group	III
Environmental Hazards	Yes

ICAO:

UN/ID no	UN3077
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Pethoxamid)
Hazard class	9
Packing Group	III

ICAO/IATA:

UN/ID no	UN3077
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Pethoxamid)
Hazard class	9
Packing Group	III

DOT

DOT UN/NA Number	UN3077
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Pethoxamid)
Hazard class	9
Packing Group	III
Marine Pollutant	Yes.

Section 15: REGULATORY INFORMATION

Regulatory Authority

This material safety data sheet has been prepared according to Brazilian legislation and ABNT NBR 14725:2009

Section 16: OTHER INFORMATION

Prepared By: FMC Corporation

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