

SAFETY DATA SHEET

Product: JIMO Inseticida Espacial

Revision: 05

Date: 09/28/2023

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1 - IDENTIFICATION

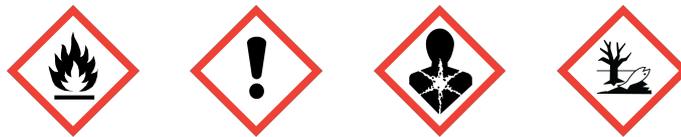
GHS Product identifier:	JIMO Inseticida Espacial
Other means of identification:	90044
Recommended use of the chemical:	Insecticide.
Specific restrictions on use:	There are not known restrictions on use.
Supplier's details:	Jimo Química Industrial Ltda. Address: Rua Ítalo Raffo 693 - Distrito Industrial, CEP: 94930-240 - RS - Brasil. Phone number: +55 51 3470 67 55 Email: jimo@jimo.com.br
Emergency phone number:	+55 51 3470 67 55 / 0800 051 41 46

2 - HAZARD IDENTIFICATION

Classification of the substance or mixture:	Flammable Liquids - Category 2; Skin Corrosion/Irritation - Category 2; Serious eye damage/eye irritation - Category 2A; Specific Target Organ Toxicity – Single Exposure - Category 3 - Narcotic; Specific Target Organ Toxicity – Repeated Exposure - Category 2; Hazardous to the Aquatic Environment - Acute Hazard - Category 1; Hazardous to the Aquatic Environment - Chronic Hazard - Category 1.
Classification system adopted:	Globally Harmonized System of Classification and Labeling of Chemicals (GHS), United Nations.

GHS label elements, including precautionary statements

Pictograms:



Signal word:	DANGER
Hazard statement(s):	H225 Highly flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H373 May cause damage to the respiratory system and to the kidneys through prolonged or repeated exposure. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statement(s):	PREVENTION: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P240 Ground and bond container and receiving equipment. P241 Use explosion-proof electrical, ventilating and lighting equipment. P242 Use non-sparking tools. P243 Take action to prevent static discharges.

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P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P264 + P265 Wash hands thoroughly after handling. Do not touch eyes.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves, protective clothing, eye protection, face protection and hearing protection.

RESPONSE TO EMERGENCY:

P302 + P352 IF ON SKIN: Wash with plenty of water.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower].
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P319 Get medical help if you feel unwell.
P321 Specific treatment.
P332 + P317 If skin irritation occurs: Get medical help.
P337 + P317 If eye irritation persists: Get medical help.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use carbon dioxide (CO₂), foam, water mist and dry chemical powder to extinguish.
P391 Collect spillage.

STORAGE:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

DISPOSITION:

P501 Dispose of contents and container in accordance with local regulations.

Other hazards which do not result in classification: The product has no other hazards.

3 - COMPOSITION/INFORMATION ON INGREDIENTS

MIXTURE

Components contributing to the hazard:	Naphtha (petroleum). hydrodesulfurized heavy (CAS 64742-82-1): 80 - 90 %; Ethyl alcohol (CAS 64-17-5): 10 - 20 %; D-tetramethrin (CAS 7696-12-0): 0.1 - 1 %; Citronella Essential Oil (CAS 91771-61-8): 0.1 - 1 %; Cyphenothrin-S (CAS 39515-40-7): 0.01 - 1 %; Prallethrin (CAS 23031-36-9): 0.01 - 1 %.
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4 - FIRST-AID MEASURES

Description of necessary first-aid measures

Inhalation:	Remove the victim to a well-ventilated area and keep at rest in a position that does not impede breathing. If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER or a doctor. Take this document.
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In accordance with Globally Harmonized System of
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Skin:	IN CASE OF CONTACT WITH SKIN (or hair): Immediately remove all contaminated clothing. Rinse the skin with water or take a shower. Take this document.
Eye:	Rinse carefully with water for several minutes. If you wear contact lenses, remove them if that's easy. If eye irritation persists: consult a physician. Take this document.
Ingestion:	Wash the victim's mouth with plenty of water. If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER or a doctor. Take this document.
Most important symptoms/effects, acute and delayed:	Causes skin irritation with redness, pain and dryness. Causes serious eye irritation with redness and pain. May cause drowsiness or dizziness, may cause dizziness and nausea. May cause damage to the kidneys and respiratory system through prolonged or repeated exposure.
Indication of immediate medical attention and special treatment needed, if necessary:	Avoid contact with the product when helping the victim. If necessary, symptomatic treatment should include, above all, support measures such as correction of hydroelectrolytic and metabolic disturbances, in addition to respiratory assistance. In case of contact with the skin, do not rub the affected area.

5 - FIRE-FIGHTING MEASURES

Extinguishing media:	Appropriate: carbon dioxide (CO ₂), foam, water mist and dry chemical powder. Inappropriate: water directly onto the burning material.
Specific hazards arising from the chemical:	Combustion of the chemical or its packaging can form irritating and toxic gases such as carbon monoxide and carbon dioxide. Very dangerous when exposed to excessive heat or other ignition sources such as: sparks, open flames or match and cigarette flames, welding operations, pilot lights and electric motors. May build up static charge from flow or agitation. They can travel over long distances, causing flashback or new fires in both open and confined environments. Containers can explode if heated.
Special protective actions for fire-fighters:	Self-contained breathing apparatus (SCBA) with positive pressure and full protective clothing. Containers and tanks involved in the fire must be cooled with water mist.

6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:	Isolate leak from ignition sources. Prevent sparks or flames. Do not smoke. Do not touch damaged containers or spilled material unless wearing appropriate clothing. Use personal protective equipment as described in section 8.
For emergency responders:	Wear complete PPE with safety glasses, safety gloves, suitable protective clothing and closed shoes. In case of leakage, where exposure is high, it is recommended to use a suitable respiratory protection mask.
Environmental precautions:	Prevent spilled product from reaching waterways and sewers.
Methods and materials for containment and cleaning up:	Use water mist or vapor suppressing foam to reduce product dispersion. Use natural or spill containment barriers. Collect spilled product and place in appropriate containers. Adsorb the remaining product with dry sand, earth, vermiculite, or any other inert material. Place the adsorbed material in appropriate containers and remove them to a safe place. For final disposal, proceed according to Section 13 of this document. Large spill: confine the liquid into a dike away from the spills for later and proper disposition. Water mist can be used to reduce of vapors, but it wont prevent ignition in closed environments.

7 - HANDLING AND STORAGE

Precautions for safe handling

Precautions for safe handling:	Handle in a ventilated area or with a general local exhaust/ventilation system. Avoid formation of vapors or mists. Avoid inhaling the product in case of formation of vapors or mists. Inspect
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containers for damage or leaks before handling. Avoid contact with incompatible materials. Use explosion-proof electrical, ventilation and lighting equipment. Wear protective gloves, protective clothing, eye protection, face protection as directed in Section 8.

General hygiene: Wash your hands thoroughly before eating, drinking, smoking or going to the toilet. Contaminated clothing must be changed and laundered before reuse.

Conditions for safe storage, including any incompatibilities

Technical measures for prevention of fire and explosion: Keep away from heat, sparks, open flames and hot surfaces. - Do not smoke. Keep container tightly closed. Ground the container vessel and product receiver during transfers. Use only non-sparking tools. Avoid the build-up of electrostatic charges.

Conditions for safe storage, including any incompatibilities: Store in a ventilated place, protected from heat. Keep away from incompatible materials. Keep stored at room temperature not exceeding 35°C. It is not necessary addition of stabilizers and antioxidants to ensure the durability. Keep away from incompatible materials.

Packaging compatibilities: Similar to the original packaging.

Inadequate packaging materials: There are not known unsuitable material.

8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limit: The values below apply to workplaces.

- Ethyl alcohol:
OSHA - PEL - TWA: 1000 ppm; 1900 mg/m³;
NIOSH - REL - TWA: 1000 ppm (1900 mg/m³);
ACGIH - TLV - STEL: 1000 ppm.

Biological limit: Not established.

Other limits and values: Not established.

Appropriate engineering controls: Promote mechanical ventilation and direct exhaust system to the outside environment. These measures help reduce exposure to the product. Maintain atmospheric concentrations, of the constituents of the product, below the indicated occupational exposure limits. Maintain atmospheric concentrations of the constituents of the material below occupational exposure limits indicated.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection: Safety glass side shields.

Skin protection: Define the use of skin and body protection based on workplace risk assessment. Appropriate protective gloves.

Respiratory protection: A risk assessment should be performed for proper definition of respiratory protection, in view of the material use conditions.

Thermal hazards: It does not present thermal hazards.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Aspect: Liquid.

Color: Colorless.

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Odour:	Characteristic.
Melting point/freezing point:	Not available.
Boiling point or initial boiling point and boiling range:	70.1 °C (158.18 °F).
Flammability:	Flammable.
Lower and upper explosion limit/flammability limit:	Not available.
Flash point:	13 °C (55.4 °F) - Closed cup.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
pH:	Not available.
Kinematic viscosity:	Not available.
Solubility(ies):	Immiscible in water. Miscible in organic solvents.
Partition coefficient n-octanol/water (log value):	Not available.
Vapour pressure:	Not available.
Relative vapour density:	Not available.
Density and/or relative density:	Relative density: 0.75 to 0.8 at 20 °C (68 °F).
Particle characteristics:	Not applicable.
Other information:	Not applicable.

10 - STABILITY AND REACTIVITY

Reactivity:	Reactivity is not to be expected under normal conditions of temperature and pressure.
Chemical stability:	Stable product under normal conditions of temperature and pressure.
Possibility of hazardous reactions:	There are not known hazardous reactions with the material.
Conditions to avoid:	Elevated temperatures. Ignition sources. Contact with incompatible materials.
Incompatible material:	Strong Oxidizing agents.
Hazardous decomposition products:	There are no known hazardous decomposition products.

11 - TOXICOLOGICAL INFORMATION

Acute toxicity:	Product not classified as acute toxic.
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ATEmix Dermal: > 5000 mg/kg.
ATEmix Vapours (4h): > 20 mg/L.
LD₅₀ Oral (rats): >2000 mg/kg.

Skin corrosion/irritation: Causes skin irritation with redness, pain and dryness.

Serious eye damage/irritation: Causes serious eye irritation with redness and pain.

Respiratory or skin sensitization: It is not expected to present respiratory or skin sensitization.

Germ cell mutagenicity: It is not expected to show mutagenicity in germ cells.

Carcinogenicity: It is not expected to be carcinogenic.

Reproductive toxicity: It is not expected to be reproductively toxic.

STOT - Single exposure: May cause drowsiness or dizziness, may cause dizziness and nausea.

STOT - Repeated exposure: May cause damage to the kidneys and respiratory system through prolonged or repeated exposure.

Aspiration hazard: It is not expected to present an aspiration hazard.

12 - ECOLOGICAL INFORMATION

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

Information regarding to:

- D-tetramethrin:

LC₅₀ (*Oncorhynchus mykiss*, 96 h): 0.01 mg/L;

EC₅₀ (*Daphnia magna*, 48 h): 0.11 mg/L.

- Cyphenothrin-S:

LC₅₀ (*Oncorhynchus mykiss*, 96 h): 0.00038 mg/L;

EC₅₀ (*Daphnia magna*, 48 h): 0.0012 mg/L.

- Prallethrin:

EC₅₀ (*Daphnia magna*, 48 h): 0.0062 mg/L;

LC₅₀ (*Oncorhynchus mykiss*, 96 h): 0.012 mg/L;

LC₅₀ (Fish, 96 h): 0.022 mg/L.

Persistence and degradability: It has persistence and is not considered rapidly degradable.

Information regarding to:

- Ethyl alcohol:

Low degradation and high persistence are expected.

Bioaccumulative potential: Presents low bioaccumulative potencial in aquatic organisms.

Information regarding to:

- Ethyl alcohol:

log *K*_{ow}: 0.31.

Mobility in soil: Not determined.

Other adverse effects: No other environmental effects known.

13 - DISPOSAL CONSIDERATIONS

Disposal methods

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Treatment and disposal must be evaluated specifically for each product. Federal, state and municipal legislation should be consulted, including: Law No. 12,305, of August 2, 2010 (National Policy on Solid Waste).
Keep product residues in their original packaging and properly closed. Disposal must be carried out as established for the product.

14 - TRANSPORT INFORMATION

Road:	UN - United Nations: Model Regulations: • Recommendations on the Transport of Dangerous Goods.
UN number:	1993
Proper shipping name:	FLAMMABLE LIQUID, N.O.S. (Naphtha (petroleum), hydrodesulfurized heavy and Ethylic alcohol)
Primary risk class or division:	3
Subsidiary risk class or division:	NA
Packing group:	II
Railway regulations:	COTIF - Convention concerning International Carriage by Rail: • Appendix C: RID - Regulations concerning the International Carriage of Dangerous Goods by Rail.
UN number:	1993
Proper shipping name:	FLAMMABLE LIQUID, N.O.S. (Naphtha (petroleum), hydrodesulfurized heavy and Ethylic alcohol)
Primary risk class or division:	3
Subsidiary risk class or division:	NA
Packing group:	II
Sea:	IMO - International Maritime Organization: • IMDG Code - International Maritime Dangerous Goods Code.
UN number:	1993
Proper shipping name:	FLAMMABLE LIQUID, N.O.S. (Naphtha (petroleum), hydrodesulfurized heavy and Ethylic alcohol)
Primary risk class or division:	3
Subsidiary risk class or division:	NA
Packing group:	II
EmS:	F-E, <u>S-E</u>
Environmental hazards:	The product is considered a marine pollutant.
Air:	IATA - International Air Transport Association: • DGR - Dangerous Goods Regulation.
UN number:	1993
Proper shipping name:	FLAMMABLE LIQUID, N.O.S. (Naphtha (petroleum), hydrodesulfurized heavy and Ethylic alcohol)
Primary risk class or division:	3

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Subsidiary risk class or
division: NA

Packing group: II

Special precautions for
user: Not applicable.

15 - REGULATORY INFORMATION

Federal Decree No. 10,088, of November 5, 2019.
Regulatory Standard No. 26 (Safety Signs), from the Ministry of Labor and Social Security.
ABNT-NBR 14725 Standard.

16 - OTHER INFORMATION

This document was prepared based on current knowledge about the proper handling of the product and under normal conditions of use, according to the application specified on the packaging. Any other form of use of the product that involves its combination with other materials, in addition to forms of use other than those indicated, are the responsibility of the user. It is warned that the handling of any chemical substance requires prior knowledge of its dangers by the user. In the workplace, it is up to the company using the product to promote the training of its employees regarding the possible risks arising from exposure to the chemical product.

Change control:

Version	Manufacture date	Changes
05	09/06/2023	Change in section: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16.

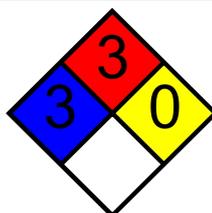
Classification of the
substance or mixture: Health: 3
Flammability: 3
Instability: 0

Classification system
adopted: Hommel Diagram - National Fire Protection Association: NFPA 704

Classification of the
substance or mixture: Health: 4
Flammability: 3
Physical Hazard: 0

Classification system
adopted: National Paint & Coatings Association: NPCA

NFPA 704:



HMIS:

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HEALTH	/	4
FLAMMABILITY		3
PHYSICAL HAZARD		0
PERSONAL PROTECTION		

Abbreviations:

ACGIH - American Conference of Governmental Industrial Hygienists;
ATEmix - Acute Toxicity Estimate of the mixture;
CAS - Chemical Abstracts Service;
EC - European Community;
EC₅₀ - Effective concentration of substance that causes 50 % of the maximum response;
EEC - European Economic Community;
K_{ow} - Octanol-water partition coefficient;
LC₅₀ - Lethal Concentration 50%;
NIOSH - National Institute for Occupational Safety and Health;
OSHA - Occupational Safety & Health Administration;
PEL - Permissible Exposure Limit;
REL - Recommended Exposure Limit;
STEL - Short Term Exposure Limit;
TLV - Threshold Limit Value;
TWA - Time Weighted Average;
UN - United Nations.

Bibliographic references:

ACGIH - AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIALS HYGIENISTS. TLVs® and BEIs®: Based on the Documentation of the Threshold Limit Values (TLVs®) for Chemical Substances and Physical Agents & Biological Exposure Indices (BEIs®). Cincinnati-USA, 2023.

GHS - GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS. 9th rev. ed. New York: United Nations, 2021.

REACH - REGISTRATION, EVALUATION, AUTHORIZATION AND RESTRICTION OF CHEMICALS. Commission Regulation (EC) No 1272/2008 of December 2008 amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals. Available at: < <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF> >. Access in: Sep. 2023.