

Revision date: 2025/08/08 Page: 1/12
Version: 3.0 (30034963/SDS GEN PA/EN)

1. Identification

Product identifier used on the label

PVP-lodine 30/06

Recommended use of the chemical and restriction on use

Recommended use*: Pharmaceutical agent

Unsuitable for use: Not intended for sale to or use by the general public.

Details of the supplier of the safety data sheet

Company:

Master Builders Solutions Panamá S.A. Galera 9130, Locales 3 y 3A
Avenida A, Panamerica Corporate Center Sur
Panamá-Pacífico, Panamá
República de Panamá
0831-01270 Paitilla, Panamá
+(507) 210-0050 -> Central Office
+(507) 297-4250 -> Site

Telephone: +(507) 210-0050

Emergency telephone number

24 Hour Emergency Response Information

International emergency number: Telephone: +49 180 2273-112 **Other means of identification**

Synonyms: 2-Pyrrolidinone, 1-ethenyl-, homopolymer, compd. with iodine

2. Hazards Identification

According to Regulation NOM-018-STPS-2015

Classification of the product

^{*} The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Revision date: 2025/08/08 Page: 2/12 Version: 3.0 (30034963/SDS_GEN_PA/EN)

STOT RE 2 Specific target organ toxicity — repeated

exposure

Aquatic Acute 2 Hazardous to the aquatic environment - acute Aquatic Chronic 2 Hazardous to the aquatic environment - chronic

Eye Dam. 1 Serious eye damage

Skin Irrit. 2 Skin irritation
Combustible Dust Combustible Dust (1) Combustible Dust

Label elements

Pictogram:







Signal Word:

Danger

Hazard Statement:

May form combustible dust concentration in air.

H318 Causes serious eye damage.

H315 Causes skin irritation.

H373 May cause damage to organs (Thyroid gland) through prolonged or

repeated exposure.

H401 Toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280 Wear protective gloves and eye protection or face protection.

P273 Avoid release to the environment.

P260 Do not breathe dust.

P264 Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or physician.

P314 Get medical attention if you feel unwell.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P391 Collect spillage.

P362 + P364 Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Disposal):

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

Hazards not otherwise classified

The product is under certain conditions capable of dust explosion.

3. Composition / Information on Ingredients

According to Regulation NOM-018-STPS-2015

Revision date: 2025/08/08 Page: 3/12 Version: 3.0 (30034963/SDS GEN PA/EN)

2-Pyrrolidinone, 1-ethenyl-, homopolymer, compd. with iodine

CAS Number: 25655-41-8 Content (W/W): 80.0 - 100.0% Synonym: No data available.

The actual concentration is withheld as a trade secret.

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing immediately and clean before re-use or dispose it if necessary.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

If on skin:

Remove contaminated clothing. Wash skin with soap and water, rinse abundantly. Seek medical attention.

If in eyes:

Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing. If irritation develops, seek medical attention.

If swallowed:

Rinse mouth and then drink 200-300 ml of water. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: itching, eczema, erythema, skin irritation, Eye irritation, conjunctivitis, lacrimation, visual disturbances

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: water spray, carbon dioxide, dry powder, Dry sand, foam

Unsuitable extinguishing media for safety reasons: water jet

Revision date: 2025/08/08 Page: 4/12 Version: 3.0 (30034963/SDS GEN PA/EN)

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

hydrogen cyanide, iodine, carbon dioxide, nitrogen oxides

The substances/groups of substances mentioned can be released in case of fire. Dust explosion hazard.

Advice for fire-fighters

Protective equipment for fire-fighting:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

6. Accidental release measures

Further accidental release measures:

Avoid dispersal of dust in the air (e.g. by clearing dusty surfaces with compressed air). Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition.

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures, see section 8. Avoid dust formation. Ensure adequate ventilation. Do not breathe dust. Avoid contact with the skin, eyes and clothing.

Environmental precautions

May be harmful to the aquatic environment. Prevent entry into drains and surface waters.

Methods and material for containment and cleaning up

For small amounts: Contain with dust binding material and dispose of.

For large amounts: Sweep/shovel up.

Dispose of absorbed material in accordance with regulations. Avoid raising dust. Cleaning operations should be carried out only while wearing breathing apparatus.

For small amounts: Sweep/shovel up. For large amounts: Sweep/shovel up.

Avoid raising dust. Nonsparking tools should be used.

7. Handling and Storage

Precautions for safe handling

Avoid dust formation. Ensure thorough ventilation of stores and work areas. Wear suitable protective clothing and eye/face protection. Avoid contact with the skin, eyes and clothing. Keep container tightly sealed.

Protection against fire and explosion:

Revision date: 2025/08/08 Page: 5/12 Version: 3.0 (30034963/SDS GEN PA/EN)

Avoid dust formation. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 660 (2025) Standard for Combustible Dust and Particulate Solids. NFPA 660 is a combination of Standards NFPA 61 (Agriculture and Food), NFPA 484 (Metals), NFPA 652 (Fundamentals of Combustible Dusts), NFPA 654 (Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids), NFPA 65 (Sulfur), and NFPA 664 (Woodworking/Processing). Consult NFPA 660 standard for relevant commodity-specific and general safety information.

Dust explosion class: Dust explosion class 1 (Kst-value >0 up to 200 bar m s-1).

Conditions for safe storage, including any incompatibilities

No applicable information available.

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

8. Exposure Controls/Personal Protection

No substance specific occupational exposure limits known.

Advice on system design:

Provide local exhaust ventilation to control dust. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Personal protective equipment

Respiratory protection:

Breathing protection if breathable aerosols/dust are formed. Wear a NIOSH-certified (or equivalent) particulate respirator.

Hand protection:

Wear chemical resistant protective gloves., Consult with glove manufacturer for testing data.

Eye protection:

Wear safety goggles (chemical goggles) if there is potential for airborne dust exposures.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment. Do not breathe dust. Avoid contact with the skin, eyes and clothing. No eating, drinking, smoking or tobacco use at the

Revision date: 2025/08/08 Page: 6/12 Version: 3.0 (30034963/SDS GEN PA/EN)

place of work. Hands and/or face should be washed before breaks and at the end of the shift. Store work clothing separately.

9. Physical and Chemical Properties

Physical state: solid

Form: amorphous powder Odour: almost odourless

Colour: brown pH value: 1.8

1.8 (pH Meter) (approx. 101.5 g/kg, 20 °C)

Melting point: > 180 °C slow decomposition (OECD Guideline

102)

Freezing point: No data available. Boiling point: (1,013 hPa)

The substance / product decomposes therefore not

determined.

Sublimation point: No applicable information available. Flash point: not applicable, the product is a solid

Flammability: not highly flammable (VDI 2263, sheet 1,

1.2 (May 1990))

Lower explosion limit: For solids not relevant for

classification and labelling. For solids not relevant for classification and labelling.

Vapour pressure: < 0.1 hPa

Upper explosion limit:

(approx. 20 °C)

Relative density: 1.365 (OECD Guideline

(20 °C) 109)

Bulk density: 450 kg/m3 Relative vapour density: not relevant

Partitioning coefficient n- < -3.1 (internal method)

octanol/water (log Pow): (23 °C)

Self-ignition

Based on its structural properties the temperature:

product is not classified as self-

igniting.

Thermal decomposition: > 180 °C, 20 J/g

Viscosity, dynamic: not applicable, the product is a solid

Viscosity, kinematic: No data available. Solubility in water: approx. 700 g/l

(20 °C)

Solubility (quantitative): No applicable information available.

Solubility (qualitative): soluble

solvent(s): alcohols, Ethanol

Molecular weight: No data available.

Evaporation rate: The product is a non-volatile solid.

Particle characteristics

Particle size distribution: typically > 100 μm (D50, Volumetric Distribution,

ISO 13320-1)

Revision date: 2025/08/08 Page: 7/12 Version: 3.0 (30034963/SDS GEN PA/EN)

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

In the presence of water or moisture metal corrosion cannot be excluded.

Oxidizing properties: not fire-propagating

Dust explosivity characteristics:

Kst: 93 m.bar/s

Dust explosion class:

Dust explosion class 1 (Kst-value >0 up to 200 bar m s-1) (St 1)

Minimum ignition energy:

The product is capable of dust explosion.

Formation of Remarks: Study scientifically not justified.

flammable gases:

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

Dust explosion hazard.

Conditions to avoid

Avoid dust formation. Avoid electro-static charge. Avoid all sources of ignition: heat, sparks, open flame.

Incompatible materials

reducing agents, metal

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

> 180 °C

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Revision date: 2025/08/08 Page: 8/12 Version: 3.0 (30034963/SDS GEN PA/EN)

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Oral

Type of value: LD50 Species: rat (male/female) Value: > 4,640 mg/kg

Inhalation

No applicable information available.

Dermal

Type of value: LD50

Species: rat

Value: > 2,500 mg/kg No mortality was observed.

Assessment other acute effects

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Irritation / corrosion

Assessment of irritating effects: Irritating to skin. Risk of serious damage to eyes.

<u>Skin</u>

Species: rabbit Result: Irritant.

Method: OECD Guideline 404

<u>Eye</u>

Species: rabbit

Result: irreversible damage Method: OECD Guideline 405

Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Guinea pig maximization test

Species: guinea pig Result: Non-sensitizing. Method: OECD Guideline 406

Aspiration Hazard

not applicable

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: Danger of serious damage to health by prolonged exposure.

Damages the thyroid.

Experimental/calculated data: No data available.

Revision date: 2025/08/08 Page: 9/12 Version: 3.0 (30034963/SDS GEN PA/EN)

Genetic toxicity

Assessment of mutagenicity: No mutagenic effect was found in various tests with bacteria and mammals.

Carcinogenicity

Assessment of carcinogenicity: No data available. Experimental/calculated data: No data available.

Reproductive toxicity

Assessment of reproduction toxicity: No data available.

Reproduction

Experimental/calculated data: No data available.

Teratogenicity

Assessment of teratogenicity: In animal studies the substance did not cause malformations.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

Acutely toxic for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish

LC50 (96 h) 6.78 mg/l, Leuciscus idus (DIN 38412 Part 15, static)

Aquatic invertebrates

EC50 (48 h) 3.23 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

The statement of the toxic effect relates to the analytically determined concentration.

Aquatic plants

EC50 (72 h) 4.91 mg/l (growth rate), Desmodesmus subspicatus (OECD Guideline 201, static) The statement of the toxic effect relates to the analytically determined concentration.

Chronic toxicity to fish

No data available regarding toxicity to fish.

Chronic toxicity to aquatic invertebrates

No data available regarding toxicity to daphnids.

Assessment of terrestrial toxicity

No data available.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms DIN 38412 Part 8 aerobic

bacterium/EC10 (17 h): 270 mg/l

Persistence and degradability

Revision date: 2025/08/08 Page: 10/12 Version: 3.0 (30034963/SDS GEN PA/EN)

Assessment biodegradation and elimination (H2O)

Not readily biodegradable (by OECD criteria). Poorly biodegradable. Poorly eliminated from water.

Elimination information

- < 20 % DOC reduction (3 h) (OECD Guideline 302 B) (aerobic, activated sludge, domestic, adapted)
- < 10 % (28 d) (ISO 14593) (aerobic, activated sludge, domestic)

Assessment of stability in water

No data available.

Bioaccumulative potential

Assessment bioaccumulation potential

Based on its structural properties, the polymer is not biologically available. Accumulation in organisms is not to be expected.

Bioaccumulation potential

No data available.

Mobility in soil

Assessment transport between environmental compartments

Adsorption to solid soil phase is not expected.

Additional information

Other ecotoxicological advice:

No data available.

13. Disposal considerations

Waste disposal of substance:

Do not discharge into waterways or sewer systems without proper authorization. Dispose of in accordance with national, state and local regulations.

Container disposal:

Dispose of container and any rinsate in an environmentally safe manner. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport

TDG

Hazard class: 9 Packing group: III

ID number: UN 3077 Hazard label: 9, EHSM

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(contains POLYVINYLPYRROLIDONE IODINE COMPLEX)

Revision date: 2025/08/08 Page: 11/12 Version: 3.0 (30034963/SDS GEN PA/EN)

Sea transport

IMDG

Hazard class: 9
Packing group: III

ID number: UN 3077 Hazard label: 9, EHSM Marine pollutant: YES

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(contains POLYVINYLPYRROLIDONE IODINE COMPLEX)

Air transport

IATA/ICAO

Hazard class: 9 Packing group: III

ID number: UN 3077 Hazard label: 9, EHSM

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(contains POLYVINYLPYRROLIDONE IODINE COMPLEX)

Further information

Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 kg or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2:10.2.7; IATA: A197; TDS: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

15. Regulatory Information

Federal Regulations

Not applicable

NFPA Hazard codes:

Health: 2 Fire: 1 Reactivity: 0 Special:

HMIS III rating

Health: 2 Flammability: 1 Physical hazard: 0

Assessment of the hazard classes according to UN GHS criteria (most recent version):

Eye Dam. 1 Serious eye damage

Skin Irrit. 2 Skin irritation

Aquatic Acute 2 Hazardous to the aquatic environment - acute Aquatic Chronic 2 Hazardous to the aquatic environment - chronic

STOT RE 2 Specific target organ toxicity — repeated

exposure

16. Other Information

SDS Prepared by:

Master Builders Solutions NA Product Regulations

SDS Prepared on: 2025/08/08

Revision date: 2025/08/08 Page: 12/12 Version: 3.0 (30034963/SDS_GEN_PA/EN)

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

This information is considered accurate but is not exhaustive and shall only be used as a guideline based on current knowledge of the chemical substance or mixture. Safety precautions suitable for the product must be applied.

Date / Revised: 2025/08/08 Version: 3.0
Date / Previous version: 2023/03/30 Previous version: 2.0

END OF DATA SHEET