

# Safety data sheet

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BASF Safety data sheet

Date / Revised: 19.04.2023 Version: 6.0

Product: PVP-lodine 30/06

(30034963/SDS\_GEN\_TH/EN)

Date of print: 07.10.2025

### 1. Substance/preparation and manufacturer/supplier identification

### **Product name:**

PVP-lodine 30/06

Use: Pharmaceutical agent

### Manufacturer/supplier:

BASF (Thai) Limited

23rd Floor, Emporium Tower, 622, Sukhumvit 24 Rd., Klongton, Klongtoey, Bangkok 10110, THAILAND

Telephone: +66 2624-1999 Telefax number: +66 2664-9254

E-mail address: Thailand-SDS-info@basf.com

### **Emergency information:**

International emergency number: Telephone: +49 180 2273-112

#### 2. Hazard identification

#### Classification according to UN GHS 2009

Classification of the substance and mixture:

Specific target organ toxicity — repeated exposure (Thyroid gland): Cat.2

Hazardous to the aquatic environment - acute: Cat.2 Hazardous to the aquatic environment - chronic: Cat.2

Serious eye damage: Cat.1

Skin irritation: Cat.2

Label elements and precautionary statement:

Pictogram:

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## Signal Word:

Danger

Hazard Statement:

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. 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 and container to hazardous or special waste

collection point.

Other hazards which do not result in classification:

The product is under certain conditions capable of dust explosion.

### 3. Composition/information on ingredients

Chemical nature

Substance nature: Substance

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

CAS Number: 25655-41-8

#### **Hazardous ingredients**

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

% STOT RE (Thyroid gland): Cat. 2

CAS Number: 25655-41-8 Aquatic Acute: Cat. 2

Skin Corr./Irrit.: Cat. 2 Aquatic Chronic: Cat. 2

formic acid

Content (W/W): > 0 % - < 1 % Flam. Liq.: Cat. 3

CAS Number: 64-18-6 Acute Tox.: Cat. 3 (Inhalation - vapour)

Acute Tox.: Cat. 4 (oral) Skin Corr./Irrit.: Cat. 1A Eye Dam./Irrit.: Cat. 1

#### 4. First-Aid Measures

General advice:

Remove contaminated clothing.

If inhaled:

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

On skin contact:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

On contact with eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Note to physician:

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

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

### 5. Fire-Fighting Measures

Suitable extinguishing media:

water spray, carbon dioxide, dry powder, Dry sand, foam

Unsuitable extinguishing media for safety reasons: water jet

Specific hazards:

hydrogen cyanide, iodine, carbon dioxide, nitrogen oxides

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

#### Special protective equipment:

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.

#### 6. Accidental Release Measures

#### Personal precautions:

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:

Do not discharge into drains/surface waters/groundwater.Inform authorities in the event of product spillage to water courses or sewage systems.

#### Methods for cleaning up or taking 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.

<u>Additional information:</u> 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.

### 7. Handling and Storage

#### 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:

The product is capable of dust explosion. Avoid dust formation. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy. Use explosion-proof apparatus and fittings.

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

#### Storage

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

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### 8. Exposure controls and personal protection

Components with occupational exposure limits

formic acid, 64-18-6;

TWA value 5 ppm (ACGIHTLV) STEL value 10 ppm (ACGIHTLV) TWA value 5 ppm (OEL (TH))

#### Personal protective equipment

#### Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Particle filter with low efficiency for solid particles (e.g. EN 143 or 149, Type P1or FFP1)

#### Hand protection:

Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc. Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

#### Eye protection:

Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

### Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

#### 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 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

Form: amorphous powder

Colour: brown

Odour: almost odourless

pH value: 1.8 (pH Meter)

(approx. 101.5 g/kg, 20 °C)

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> 180 °C Melting point:

slow decomposition

Boiling point:

(1,013 hPa)

The substance / product decomposes therefore not

determined.

Flash point:

not applicable, the product is a solid

Evaporation rate:

The product is a non-volatile solid.

Flammability (solid/gas): not highly flammable

(VDI 2263, sheet 1, 1.2)

(OECD Guideline 102)

Lower explosion limit:

For solids not relevant for

classification and labelling.

Upper explosion limit:

For solids not relevant for classification and labelling.

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

Self ignition:

Based on its structural properties the

product is not classified as self-

igniting.

Test type: Spontaneous self-

(VDI 2263, sheet 1, 1.4.1)

ignition at room-temperature.

Self heating ability:

It is not a substance capable of spontaneous heating according to UN transport regulations class 4.2.

Minimum ignition energy:

The product is capable of dust

explosion.

Explosion hazard: Product is not explosive, however a

dust explosion could result from an

air / dust mixture.

Fire promoting properties: not fire-propagating

< 0.1 hPa Vapour pressure:

(approx. 20 °C)

Relative density: 1.365 (OECD Guideline 109)

(20 °C)

450 kg/m3

Relative vapour density (air):

not relevant

Solubility in water:

Bulk density:

approx. 700 g/l

(20 °C)

Solubility (qualitative) solvent(s): alcohols, ethanol

soluble

Partitioning coefficient n-octanol/water (log Pow): < -3.1

(23 °C)

(internal method)

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Viscosity, dynamic:

not applicable, the product is a solid

### 10. Stability and Reactivity

Conditions to avoid:

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

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

Substances to avoid: reducing agents, metal

Corrosion to metals: In the presence of water or moisture metal corrosion cannot be excluded.

Hazardous reactions: Dust explosion hazard.

Hazardous decomposition products:

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

Chemical stability:

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

Reactivity:

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

### 11. Toxicological Information

#### Routes of exposure

### **Acute oral toxicity**

Experimental/calculated data: LD50rat (oral): > 4,640 mg/kg

### **Acute dermal toxicity**

LD50 rat (dermal): > 2,500 mg/kg No mortality was observed.

#### Assessment of acute toxicity

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

#### **Symptoms**

Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

#### **Irritation**

Assessment of irritating effects:

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Irritating to skin. Risk of serious damage to eyes.

Experimental/calculated data:

Skin corrosion/irritation rabbit: Irritant. (OECD Guideline 404)

Serious eye damage/irritation rabbit: irreversible damage (OECD Guideline 405)

### Respiratory/Skin sensitization

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies.

Experimental/calculated data:

Guinea pig maximization test guinea pig: Non-sensitizing. (OECD Guideline 406)

### Germ cell mutagenicity

Assessment of mutagenicity:

No mutagenic effect was found in various tests with bacteria and mammals.

### Carcinogenicity

Assessment of carcinogenicity:

No data available.

#### Reproductive toxicity

Assessment of reproduction toxicity:

No data available.

#### **Developmental toxicity**

Assessment of teratogenicity:

In animal studies the substance did not cause malformations.

#### Specific target organ toxicity (single exposure)

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

### Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

Danger of serious damage to health by prolonged exposure. Damages the thyroid.

#### **Aspiration hazard**

not applicable

### 12. Ecological Information

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### **Ecotoxicity**

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.

Microorganisms/Effect on activated sludge:

EC10 (17 h) 270 mg/l, Pseudomonas putida (DIN 38412 Part 8, aerobic)

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.

#### **Mobility**

Assessment transport between environmental compartments:

Adsorption to solid soil phase is not expected.

#### Persistence and degradability

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.

### **Bioaccumulation potential**

Assessment bioaccumulation potential:

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

### 13. Disposal Considerations

Observe national and local legal requirements.

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### 14. Transport Information

**Domestic transport:** 

UN number or ID number: UN 3077

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

(POLYVINYLPYRROLIDONE IODINE COMPLEX)

Transport hazard class(es): 9, EHSM

Packing group:

Environmental hazards: yes

Special precautions for

user:

None known

#### Sea transport

**IMDG** 

UN number or ID number: UN 3077

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

(POLYVINYLPYRROLIDONE IODINE COMPLEX)

Transport hazard class(es): 9, EHSM

Packing group: III Environmental hazards: yes

Marine pollutant: YES

Special precautions for

user:

EmS: F-A; S-F

#### Air transport

IATA/ICAO

UN number or ID number: UN 3077

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

(POLYVINYLPYRROLIDONE IODINE COMPLEX)

Transport hazard class(es): 9, EHSM

Packing group: III Environmental hazards: yes

Special precautions for None known

user:

#### **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)

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### 15. Regulatory Information

#### **Other regulations**

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

#### 16. Other Information

Any other intended applications should be discussed with the manufacturer. Corresponding occupational protection measurements must be followed.

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.