

# Safety data sheet

Page: 1/11

---

BASF Safety data sheet according to the United Nations' Globally Harmonized System (UN GHS)

Date / Revised: 05.11.2024

Version: 2.0

Product: **PVP AI5**

(ID no. 30111521/SDS\_GEN\_00/EN)

Date of print 12.05.2025

---

## 1. Identification

### Product identifier

**PVP AI5**

### Details of the supplier of the safety data sheet

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Operating Division Nutrition and Health

Telephone: +49 621 60-48434

E-mail address: EN-global-safety-data@basf.com

### Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

---

## 2. Hazards Identification

### Classification of the substance or mixture

According to UN GHS criteria

| Skin Irrit. 3

For the classifications not written out in full in this section the full text can be found in section 16.

## Label elements

### Globally Harmonized System (GHS)

Signal Word:

| Warning

Hazard Statement:

| H316 Causes mild skin irritation.

Precautionary Statements (Response):

| P332 + P313 If skin irritation occurs: Get medical attention.

## Other hazards

### According to UN GHS criteria

No specific dangers known, if the regulations/notes for storage and handling are considered.

---

## 3. Composition/Information on Ingredients

### Substances

Not applicable

### Mixtures

#### Chemical nature

polyvinylpyrrolidone

#### Hazardous ingredients (GHS)

According to UN GHS criteria

| Formic acid

Content (W/W):  $\geq 1\%$  -  $< 3\%$   
CAS Number: 64-18-6  
EC-Number: 200-579-1  
INDEX-Number: 607-001-00-0

Flam. Liq. 3  
Acute Tox. 3 (Inhalation - vapour)  
Acute Tox. 4 (oral)  
Skin Corr./Irrit. 1A  
Eye Dam./Irrit. 1  
H226, H314, H331, H302  
EUH071

Specific concentration limit:

Skin Corr./Irrit. 2: 2 -  $< 10\%$   
Eye Dam./Irrit. 2: 2 -  $< 10\%$   
Skin Corr./Irrit. 1A:  $\geq 90\%$   
Skin Corr./Irrit. 1B: 10 -  $< 90\%$

For the classifications not written out in full in this section the full text can be found in section 16.

---

## 4. First-Aid Measures

### Description of first aid measures

Remove contaminated clothing.

If inhaled:

| Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

| Wash thoroughly with soap and water

On contact with eyes:

| 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.

### Most important symptoms and effects, both acute and delayed

| 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., (Further) symptoms and / or effects are not known so far

| Hazards: 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. (Further) symptoms and / or effects are not known so far

### Indication of any immediate medical attention and special treatment needed

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

---

---

## 5. Fire-Fighting Measures

### Extinguishing media

Suitable extinguishing media:  
dry powder, foam

Unsuitable extinguishing media for safety reasons:  
carbon dioxide

Additional information:

Avoid whirling up the material/product because of the danger of dust explosion.

### Special hazards arising from the substance or mixture

harmful vapours, carbon oxides

Generation of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

### Advice for fire-fighters

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations. Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

---

## 6. Accidental Release Measures

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

For non-emergency personnel: Avoid dust formation. Use personal protective clothing. Information regarding personal protective measures, see section 8.

For emergency responders: Take appropriate protective measures.

### Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

### Methods and material for containment and cleaning up

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

For large amounts: Pick up with suitable appliance and dispose of.

Avoid raising dust. Dispose of absorbed material in accordance with regulations.

---

## 7. Handling and Storage

### Precautions for safe handling

Provide exhaust ventilation.

No eating, drinking, smoking or tobacco use at the place of work. Wash hands before breaks and at end of work. Remove contaminated clothing and protective equipment before entering eating areas.

Protection against fire and explosion:

Avoid dust formation. The product is capable of dust explosion. Take precautionary measures against static discharges. Avoid all sources of ignition: heat, sparks, open flame. Avoid deposition of dust.

### Conditions for safe storage, including any incompatibilities

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

---

## 8. Exposure Controls/Personal Protection

### Control parameters

#### Components with occupational exposure limits

64-18-6: Formic acid

9003-39-8: 2-Pyrrolidinone, 1-ethenyl-, homopolymer, cross-linked

### Exposure controls

#### Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Chemical resistant protective gloves (EN ISO 374-1)

Suitable materials 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), polyvinylchloride (0.7 mm) and other

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.

Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Safety glasses with side-shields (frame 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

Wearing of closed work clothing is recommended. No eating, drinking, smoking or tobacco use at the place of work. Handle in accordance with good industrial hygiene and safety practice.

---

## 9. Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

State of matter:	solid
Form:	amorphous powder
Odour:	characteristic, faint odour
melting point (decomposition):	> 130 °C
Boiling range:	not applicable
Flash point:	not applicable
Auto-ignition temperature:	> 425 °C
Thermal decomposition:	No data available.
pH value:	>= 130 °C
Solubility in water:	3 - 5
Vapour pressure:	soluble
Density:	negligible
	No information is available for the absolute density. Instead the bulk density was determined as a more relevant value.

### 9.2. Other information

#### Information with regard to physical hazard classes

##### Explosives

Explosion hazard:	not explosive	
	not explosive	(other)

##### Oxidizing properties

Fire promoting properties:	not fire-propagating
	not fire-propagating

##### Substances and mixtures, which emit flammable gases in contact with water

Formation of flammable gases:	Forms no flammable gases in the presence of water.
-------------------------------	--

#### Other safety characteristics

Bulk density:	400 - 600 kg/m <sup>3</sup>
SAPT-Temperature:	Product does not fulfil criteria for polymerizing substances according to transport regulations. - The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

---

## 10. Stability and Reactivity

### Reactivity

Formation of flammable gases:	Remarks:	Forms no flammable gases in the presence of water.
-------------------------------	----------	--

### Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions. Dust explosion hazard.

### Incompatible materials

Substances to avoid:  
strong alkalis

### Hazardous decomposition products

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

---

## 11. Toxicological Information

### Information on toxicological effects

#### Acute toxicity

Assessment of acute toxicity:  
Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation.

Experimental/calculated data:  
LD50 rat (oral): > 2.000 mg/kg (BASF-Test)

LC50 rat (by inhalation): > 5,2 mg/l 4 h (OECD Guideline 403)

#### Irritation

Assessment of irritating effects:  
| Skin contact causes slight irritation.

Experimental/calculated data:  
Skin corrosion/irritation rabbit: non-irritant (Draize test)

Serious eye damage/irritation rabbit: non-irritant (Draize test)

#### Respiratory/Skin sensitization

Assessment of sensitization:  
| Not classified, due to lack of data.

### Germ cell mutagenicity

#### Assessment of mutagenicity:

The substance was not mutagenic in studies with mammals.

### Carcinogenicity

#### Assessment of carcinogenicity:

In long-term animal studies in which the substance was given in high doses by feed, a carcinogenic effect was not observed.

### Reproductive toxicity

#### Assessment of reproduction toxicity:

| Not classified, due to lack of data.

### Developmental toxicity

#### Assessment of teratogenicity:

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

### Specific target organ toxicity (single exposure)

#### Assessment of STOT single:

| Not classified, due to lack of data.

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

#### Assessment of repeated dose toxicity:

| Not classified, due to lack of data.

### Aspiration hazard

| Not relevant.

---

## 12. Ecological Information

### Toxicity

#### Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to 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) > 10.000 mg/l, *Leuciscus idus* (DIN 38412 Part 15, static)

#### Microorganisms/Effect on activated sludge:

EC20 (0,5 h) > 1.995 mg/l, activated sludge, industrial (OECD Guideline 209, aerobic)

## Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O):

Poorly eliminated from water.

Elimination information:

< 10 % DOC reduction (15 d) (OECD Guideline 302 B) (aerobic, activated sludge, industrial) Poorly eliminated from water.

## Bioaccumulative potential

Bioaccumulation potential:

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

## Results of PBT and vPvB assessment

According to Annex XIV of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. Self classification

## Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

---

## 13. Disposal Considerations

### Waste treatment methods

Must be disposed of or incinerated in accordance with local regulations.  
No disposal via sewage or waste water systems.

Contaminated packaging:

Uncontaminated packaging can be re-used.

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

---

## 14. Transport Information

### Land transport

ADR

Not classified as a dangerous good under transport regulations

---

Safety data sheet according to the United Nations' Globally Harmonized System (UN GHS)

Date / Revised: 05.11.2024

Version: 2.0

Product: **PVP AI5**

(ID no. 30111521/SDS\_GEN\_00/EN)

Date of print 12.05.2025

---

UN number or ID number: Not applicable  
UN proper shipping name: Not applicable  
Transport hazard class(es): Not applicable  
Packing group: Not applicable  
Environmental hazards: Not applicable  
Special precautions for user: None known

#### RID

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable  
UN proper shipping name: Not applicable  
Transport hazard class(es): Not applicable  
Packing group: Not applicable  
Environmental hazards: Not applicable  
Special precautions for user: None known

#### **Inland waterway transport**

##### ADN

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable  
UN proper shipping name: Not applicable  
Transport hazard class(es): Not applicable  
Packing group: Not applicable  
Environmental hazards: Not applicable  
Special precautions for user: None known

#### Transport in inland waterway vessel

Not evaluated

#### **Sea transport**

##### IMDG

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable  
UN proper shipping name: Not applicable  
Transport hazard class(es): Not applicable  
Packing group: Not applicable  
Environmental hazards: Not applicable  
Special precautions for user: None known

#### **Air transport**

IATA/ICAO

Safety data sheet according to the United Nations' Globally Harmonized System (UN GHS)

Date / Revised: 05.11.2024

Version: 2.0

Product: **PVP AI5**

(ID no. 30111521/SDS\_GEN\_00/EN)

Date of print 12.05.2025

	Not classified as a dangerous good under transport regulations
UN number or ID number	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

### Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

## 15. Regulatory Information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

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

This product is of industrial quality and unless otherwise specified or agreed intended exclusively for industrial use. This includes the mentioned and recommended usage. Any other intended applications should be discussed with the manufacturer. In particular this concerns the application for products that are the object of special standards and regulations.

Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:

Skin Irrit.	Skin irritation
Flam. Liq.	Flammable liquids
Acute Tox.	Acute toxicity
Skin Corr./Irrit.	Skin corrosion/irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation
H226	Flammable liquid and vapour.
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.
H302	Harmful if swallowed.
EUH071	Corrosive to the respiratory tract.

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.

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