

(according to Reg. EU 1907/2006/EC, Article 31, amended by Regulation (EU) No. 453/2010)

First issued: Jan 1, 2009 Product: COPOVIDONE (PVP/VA) POWDER

Last updated: Mar 11, 2015 Version: 2.0

1. Substance/preparation and company name

COPOVIDONE (PVP/VA) POWDER

Company:

JH Nanhang Life Sciences Co., Ltd.

Quzhou Hi-Tech Development Zone, Zhejiang, P.R.China

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2. Composition/information on ingredients

Chemical nature:

Copolymer :1-vinyl-2-pyrrolidone and vinyl acetate in ratio 60:40

CAS-No. 25086-89-9

EINECS-No. - (Polymer; starting materials listed in: EINECS)

INCI-name: PVP/VA Copolymer

3. Possible hazards

Critical hazards to man and the environment: none

4. First aid measures

No special measures necessary.

5. Fire fighting measures

Suitable extinguishing media: water

The following can be given off in a fire: nitrogen oxides (NOx), carbondioxide (CO2), hydrogen cyanide

Special protective equipment: In case of fire, wear a self contained breathing apparatus.

Further information: Dispose of fire debris and contaminated extinguishing water in accordance with local regulations.

6. Accidental release measures

Personal precautions: Avoid dust formation.

Environmental precautions: Do not let product enter drains.

Methods for cleaning up: Sweep/shovel up.

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7. Handling and storage

Handling

Protection against fire and explosion: Avoid dust formation.

Take precautionary measures against static discharges.

The usual precautions for the handling of chemicals must be observed.

Storage

Keep tightly closed in a dry and cool place.

8. Exposure controls and personal protection

Components with workplace control parameters

Product contains as residual monomer(s):

vinyl acetate (traces):

MAK: $10 \text{ ml/m}^3 = 35 \text{ mg/m}^3$

TLV: 10 ppm = 35 mg/m^3

1-vinyl-2-pyrrolidone (traces)

Personal protective equipment

Respiratory protection: not necessary

Hand protection: not necessary

Eye protection: not necessary

General safety and hygiene measures:

The usual precautions for the handling of chemicals must be observed.

9. Physical and chemical properties

Form: powder

Colour: white –off white

Odour: faint specific odour

Change in physical state

Melting point/melting range: >=140 'C

Flash point: > 215 'C

Ignition temperature: not readily ignited

Bulk density: 0.4g/cm³



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Solubility in water: (23 'C) > 300 g/l Solubility in other solvents: soluble in many organic solvents pH value: (at 100 g/l, 20'C) 3-7 Octanol/water partition coefficient (log POW): -2.5

10. Stability and reactivity

Thermal decomposition: >=140 'C

Hazardous reactions: dust explosion hazard

Hazardous decomposition products:

None provided product is correctly processed.

11. Toxicological information

Acute toxicity

LD50/oral/rat: > 5 000 mg/kg

Primary skin irritation/rabbit test: non-irritant

Primary mucous membrane irritation/rabbits' eyes test: non-irritant

12. Ecological information

Elimination information

Degree of elimination: < 20%

Evaluation: hard to eliminate

Behaviour and environmental fate

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

Ecotoxic effects

Toxicity to fish (acute): LC50/Leuciscus idus/: > 10 000 mg/l/96h No Observed Effect Concentration (NOEC): 10 000 mg/l EC/LC0 (48 h): > 10 000 mg/l Toxicity to daphnae (acute): Daphnia magna





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 $\begin{array}{l} \mbox{EC/LC0(48 h): > 100 mg/l} \\ \mbox{EC/LC50 (48 h): > 100 mg/l} \\ \mbox{EC/LC100(48 h): > 100 mg/l} \\ \mbox{Toxicity to algae: Scenedesmus subspicatus} \\ \mbox{EC/LC10 (72 h): > 100 mg/l} \\ \mbox{EC/LC50 (72 h): > 100 mg/l} \\ \mbox{EC/LC90 (72 h): > 100 mg/l} \\ \mbox{Toxicity to bacteria: Pseudomonas putida Test method: DIN 38412 Part 8} \\ \mbox{Toxic limit concentration > 20 000 mg/l} \\ \mbox{Further ecological information} \\ \mbox{No negative ecological effects are expected according to the present state of knowledge.} \end{array}$

13. Disposal considerations

Product: Must be disposed of by special means, e.g. suitable incineration, in accordance with local regulations.

14. Transport information

Not classified as hazardous under transport regulations.

15. Regulatory information

Labeling according to EEC Directives, not subject to labeling

16. Other information

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. Recipients of our product must take responsibility for observing existing laws and regulations.