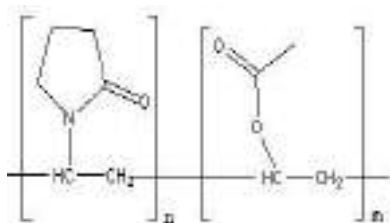


PVP/VA64

1 SYNONYMS: Vinylpyrrolidone and vinyl acetate copolymer, Copovidone, PVP/VA Copolymer

1.1 STRUCTURAL FORMULA



CAS NO.: 25086-89-9

n=1.2m

Density@25°C: 1.102 g/ml

Melting Point: ≥140°C decomposition

Flash Point: 215°C

Density: 20°C 1.2g/cm³

Bulk density : 100-130kg/m³

Solubility in water 23°C : ≥300g/L

Formula: (C₆H₉NO)_n + (C₄H₆O₂)_m

1.2 SPECIFICATIONS (EP10.0)

No.	Items	Specification
1.	Aspect	White or yellowish-white, hygroscopic powder
2.	Identifications A、 B、 C	Positive
3.	Appearance of solution	Clear and NMT B ₅ , R ₅ or BY ₅
4.	K-value	27.0 - 33.0
5.	Aldehydes, ppm	≤ 500
6.	Peroxides, ppm	≤ 400
7.	Hydrazine, ppm	≤ 1
8.	Monomers, %	≤ 0.1
9.	Impurity A (2-pyrrolidone), %	≤ 0.5
10.	Loss on drying, %	≤ 5
11.	Sulfated ash, %	≤ 0.1



12.	Heavy metals (As Lead), ppm	≤ 20
13.	Nitrogen content, %	7.0 - 8.0
14.	Ethenyl acetate, %	35.3 - 42.0
15.	* Total Aerobic Plate count, CFU/g	≤100
16.	* Total Mold/Yeast count, CFU/g	≤100
17.	* E.coli , CFU/g	Not detected
18.	* Staphylococcus Aureus , CFU/g	Not detected
19.	* Pseudomonas Aeruginosa , CFU/g	Not detected
20.	* Salmonella, CFU/g	Not detected

Note: The above tests with * are performed randomly.

1.3 DESCRIPTION

The raw material used for PVP/VA64 are vinylpyrrolidone, ethyl alcohol, vinyl acetate. PVP/VA64 exists as powder or aqueous solution. It can dissolve in water and variety of organic solvent. It is generally used in cosmetics, surfactants , pharmaceutical industry and other related industrial fields.

1.4 SYNTHESIS FLOW CHART

Vinylpyrrolidone + ethyl alcohol + vinyl acetate → filtrate → mixing →
spray drying → packaging

1.5 APPLICATIONS

Cosmetics: PVP/VA64 plays a good role as film-former and hair-fixing agent. Its hydrophobe decreases with the increase in the proportion of vinyl acetate in the molecular. This property is extremely useful for PVP/VA64 as hair sprays and hair set lotion. If being used with PVP K30, the effect would be enhanced.

OTHER APPLICATIONS:

Remoistenable adhesive and other adhesives for paper.

Viscosity-enhancing agent and protecting colloid for printing ink

Binder in coatings(paints) and protecting colloid for printing ink

Binder in coatings(paints) and stabilizer for the dispersion of dyeing.



1.6 PACKING

25kgs Plastic drum / 25kgs Fibre drum

1.7 SAFETY

There is no critical hazard to man and environment. Care should be used when in contact with the powder dust during usage. Personal precautions: Avoid dust formation.

Environmental precautions: Do not allow product to enter drains.

Methods for cleaning up: Sweep/shovel up.

If adhered to the skin or mucosa please use water to wash.

1.8 STORAGE & HANDLING

PVP/VA64 is rather stable. Store in an airtight container, protected from the humidity (the product is hygroscopic).

1.9 SHELF LIFE

The shelf life is three years.