

NUMBER 4853-1

## PVP/VA S-630 copolymer

### Description

PVP/VA S-630 copolymer is a linear, random copolymer produced by the free-radical polymerization of the vinylpyrrolidone to vinyl acetate (60/40 ratio). PVP/VA S-630 copolymer is supplied as a free-flowing white powder.

### Key Attributes

- PVP/VA S-630 copolymer produces transparent, flexible, oxygen permeable glossy films which adhere to glass, plastics and metals.
- Soluble in alcohols, esters and ketones, insoluble in ethers and aliphatic hydrocarbons.
- Soluble in water.
- Exhibits both cohesive and adhesive properties.

### Applications and Usage Notes

- In remoistenable, hot-melt adhesives.
- In repulpable, pressure sensitive adhesives, where the water solubility of PVP/VA S-630 copolymer facilitates recycling.
- In a hot-melt adhesive for a diaper wetness indicator system.
- As a binder for dry-film photoresists and ceramics.
- In solder masks utilizing aqueous processing.
- Improves print receptivity with respect to inkjet coatings.
- Membranes- macroporous, multipurpose desalination, gas separation and liquid ultrafiltration.

## Typical Product Properties

Property	S-630
Appearance	White Powder
VP/VA ratio	60 / 40
Color (APHA) – as is	60 max.
K-Value (1% in EtOH)	30 – 50
% Moisture	5 max.
% Solids	95 – 100
% Nitrogen	7.8 - 8.8
% Ash	< 0.01
Mw (PEO standards)	51,000
Polydispersity (Mw/Mn)	4.7
Intrinsic Viscosity [η] @ 25°C (dl/g)	0.424
Brookfield viscosity, cps <sup>a</sup>	670 (38% solids @ 30°C in H <sub>2</sub> O)
Specific Gravity @ 25°C	1.081
Tg (°C)	110
Cloud Point (°C, 5% aq.)	16.1
Saponification Number (mg KOH/g) – as is	241

<sup>a</sup> DV-II, Spindle RV #7, 20 rpm, 22-23°C

## Packaging Information

Product	Physical Form	Pkg Type	Net Wgt (lbs)	Net Wgt (kgs)
PVP/VA S-630	Powder	Fiber Drum	110 lbs	49.9 kgs

## Product Safety Information

For health and safety data and handling, storage and disposal procedures, please refer to the Safety Data Sheet (SDS) and product label.

The components of this product are authorized by the FDA for indirect food contact applications. The actual subsections are:

- 21 CFR 175.105 - adhesives - no specific quantity limitations associated with this usage.
- 21 CFR 176.170 - manufacture of paper and paperboard that may contact fatty & aqueous food-- this is subject to extractives limitations.
- 21 CFR 176.180 - manufacture of paper and paperboard that may contact dry food- no specific quantity limitations associated with this usage

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