

## **TDS**

## L-61061 (NVP) N-vinylpyrrolidone

CAS#: 88-12-0 C6H9NO Molecular weight (g/mol): 111.14

### **Description**

**L-61061** NVP is a monofunctional organic compound with high polarity, cationic activity, water solubility and chemical stability. It is miscible with ethanol and other organic solvents and easily copolymerized with other vinyl compounds. It is used in the wood flooring industry, paper or paperboard industry, packaging adhesive materials, and screen ink industry.

### **Technical data**

Appearance	Transparent liquid
Color Value (APHA)	≤80
Acid value (mg KOH/g)	≤0.5
Viscosity (25°C, CPS)	3~8
Moisture %	≤0.2
Inhibitor (ppm)	≤300
Refractive Index	1.554
Surface tension Dynes/cm,20°C	52.3
Glass transition temperature Tg,°C	-65
Functional Group	1

### **Applications**

UV adhesive, UV inkjet, UV ink, UV coating, UV hydrophobic coating, etc.



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#### **Performance**

- 1. **Plastics**: This monomer can be added to the formulation of UV-curable coatings to form flexible and hard plastic films. Adding NVP to radiation medical formulations can improve the elongation, viscosity, etc. of high-gloss and low-gloss coatings.
- 2. **Wood**: Enhanced product performance, increased productivity and reduced pressure on environmental pollution are the main motivations for the use of diffuse-shaped coatings in the furniture industry. The addition of NVP to UV-resistant coatings used in the wooden flooring industry can provide physical properties equivalent to wax-free flooring.
- 3. **Papermaking**: UB and EB-cured coatings used in paper or paperboard generally require lower viscosity and high reactivity.

NVP meets these standards by improving flow and measurement levels, and maintaining good curing characteristics.

- 4. **Metal**: UV coatings for metals are generally formulated using cationic vinyl ether/epoxy chemistries or heterocyclic systems. The function of NVP is to crosslink with vinyl ether or acrylic functional groups to form an excellent active diluent in these systems.
- 5. **Ink**: The packaging market uses EB and UV curing technology to speed up production and reduce energy consumption. Curable inks with excellent performance and low odor occupy a significant share in the screen ink market.
- 6. **Electronics**: Electrical equipment manufacturers rely on UV coatings' fast processing and low temperature treatment process to protect cables and electrical components as well as printed circuit boards.
- 7. **Adhesives**: Stringent emission requirements and high curing rates have prompted the industry to develop a wide range of UV-curable adhesives.

### Storage

To prevent the product from being highly active and causing a polymerizing reaction, please seal it and store it away from heat sources and sunlight. The recommended storage temperature is no higher than 30°C. Unused products must be sealed and stored in a timely manner. Do not store them in the open. At 25°C and with ventilation, the safe storage period is 6 months. 25KG/200KG/barrel

# Tips: L-61061 UV curing has low shrinkage and excellent adhesion on a variety of metal substrates.

Note: Technical data represents typical values only. In view of the differences in formulas, production process, conditions, all the above statements must be adjusted according to the actual situation, our company does not make any promises. Our company reserves the right to reform its products without prior notice of any changes.