

## Product Data Sheet

### YDNU-65 | High Solid Methylated Urea Formaldehyde Resin

Ydnresin | A Division of YDN Group

 *Updated: May 2025*

## 1. Product Description

**YDNU-65** is a high solid content, solvent-free **methylated urea formaldehyde resin** designed as a crosslinking agent for hydroxyl-functional polymers in waterborne and solvent-based systems. It enables rapid curing at low temperatures without acid catalysts, making it ideal for eco-friendly, fast-curing coatings and paper finishing.

## 2. Key Features

-  **High Solid Content** ( $\geq 85\%$ )
-  **Fast-Curing** – Up to 2 $\times$  faster than traditional UF resins
-  **Solvent-Free** – Low VOC and compliant with global environmental standards
-  **Catalyst-Free Performance** – No acid curing agent required
-  **Excellent Compatibility** – With alkyds, acrylics, polyesters, epoxies
-  **Low Free Formaldehyde** ( $\leq 0.5\%$ )
-  **Water Soluble** – Easy to formulate in aqueous systems
-  **Economical & Stable** – Long shelf life and cost-effective

## 3. Typical Applications

- Water-based **wood topcoats** and **clear lacquers**
- Fast-drying **alkyd baking enamels**
- **Paper coating** and surface sizing
- Low-temperature industrial metal finishes

---

## 4. Technical Specifications

Property	Test Method	Typical Value
Appearance	Visual Inspection	Transparent viscous liquid
Solid Content (105°C, 3 hrs)	ASTM D1259	≥85%
Viscosity (30°C)	ASTM D2196	3000–10000 mPa·s
Density (23°C)	ASTM D1475	~1200 kg/m <sup>3</sup>
Flash Point (Closed Cup)	ASTM D93	76°C
Free Formaldehyde Content	Internal Method	≤0.5% by weight
Solubility in Water	Visual/Practical Test	Fully Soluble
Solubility in Xylene	Visual/Practical Test	Partially Soluble
Storage Stability	Visual, 23°C sealed drum	≥6 months

---

## 5. Solubility & Compatibility

YDNU-65 blends well with:

- **Alkyd Resins**
- **Acrylic Emulsions**
- **Polyester Polyols**
- **Epoxy Esters**

Note: When using aliphatic hydrocarbon solvents, inclusion of oxidative co-solvents is recommended to maintain clear solution stability.

## 6. Packaging

-  20L Plastic Drum
-  200L Steel Drum
-  1000L IBC Tank

---

## 7. Storage & Handling

- Store in a **cool, dry place**, away from direct sunlight.
- Avoid freezing or excessive heat.
- Use with proper **ventilation and PPE** (gloves, goggles).
- Shelf life: **6 months** in unopened packaging under ambient conditions.

---

## 8. Regulatory Compliance

-  REACH Compliant
-  RoHS Compliant
-  Low VOC Formulation
-  Formaldehyde content <0.5%

---

## 9. Contact Information

### Ydnresin | A Division of YDN Group

 No. 2088, Jiuliting Avenue, Caoqiao Street, Pinghu City, Zhejiang Province, China

 Email: [sales@ydnresin.com](mailto:sales@ydnresin.com)

# YDNResin

*Pioneering Performance; Empowering Industry, Since 2002.*

 Phone / WhatsApp: +86-135-4070-2776 | +86-135-8634-6868

 Website: [www.ydnresin.com](http://www.ydnresin.com)