

## Product Data Sheet

### YDN525 | High Imino Methyl Etherified Melamine Resin

Ydnresin | A Division of YDN Group

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## 1. Product Description

YDN525 is a **water-compatible high-imino melamine formaldehyde resin** designed for use as an amino crosslinking agent in **waterborne and solvent-based baking coating systems**. With partial water solubility, high reactivity, and low VOC release, it enables high-performance, environmentally friendly coatings for wood, metal, plastics, and paper.

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## 2. Key Features

- **✓ High Imino Content** – Improves curing speed and film hardness
- **✓ Solvent: Isobutanol** – Balanced reactivity and storage stability
- **✓ Self-Catalyzing Curing** – Compatible with low-acid resins, no strong acid required
- **✓ Low VOC Emissions** – Less weight loss and reduced exhaust during baking
- **✓ Excellent Compatibility** – Works well with waterborne acrylics, polyesters, epoxies, and alkyds
- **✓ Enhanced Coating Properties** – Reduces bubbling, improves salt spray and water resistance

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## 3. Typical Applications

- Water-based and solvent-based baking enamels

- Industrial metal coatings
- Wood furniture topcoats and clear finishes
- Paper surface coatings
- Acrylic and polyester systems for plastics and appliances

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## 4. Technical Specifications

Property	Typical Value
Appearance	Transparent to light-yellow viscous liquid
Solvent	Isobutanol
pH (1:1 in water)	8.0–9.5
Non-Volatile Content (105°C × 3h)	75–80%
Viscosity (30°C)	1000–3000 mPa·s
Free Formaldehyde Content	≤1.0 wt%
Solubility in Water	Partially Soluble
Solubility in Xylene	Partially Soluble
Shelf Life	6 months (cool, dry storage in sealed drums)

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## 5. Compatibility

YDN525 has strong compatibility with:

- Short- and medium-oil **alkyd resins**
- **Polyester polyols** (especially water-based)
- **Acrylic dispersions** and emulsions
- **Epoxy esters**
- **Cellulose nitrate** and cellulose acetate butyrate

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## 6. Packaging

-  20L Plastic Drums
-  200L Steel Drums
-  1000L IBC Tanks

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## 7. Storage & Handling

- Store in **cool, dry, ventilated** areas
- Keep containers tightly sealed
- Avoid heat and sunlight exposure
- **Shelf life:** 6 months in unopened drums
- Use **gloves and goggles** during handling

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## 8. Regulatory & Environmental

-  REACH Compliant
-  RoHS Compliant
-  Formaldehyde  $\leq 1.0\%$
-  Low VOC emissions during baking
-  Environmentally friendlier alternative to traditional amino resins

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## 9. Contact Information

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# YDNResin

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