

Material Safety Data Sheet (MSDS)

YDN525 | High Imino Methyl Etherified Melamine Resin

Prepared by Ydnresin | A Division of YDN Group

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SECTION 1: Identification

Product Name: YDN525

Chemical Name: Methyl Etherified Melamine Formaldehyde Resin


Recommended Use: Crosslinking agent for water-based and solvent-based baking finishes

Manufacturer:

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SECTION 2: Hazard Identification

Classification (GHS)	Category
Eye Irritation	Category 2A
Skin Sensitization	Category 1
Specific Target Organ Toxicity (STOT-SE)	Category 3
Flammable Liquid (due to solvent)	Category 3

Signal Word: *Warning*

Hazard Statements:

- H226: Flammable liquid and vapor

- H317: May cause allergic skin reaction
- H319: Causes serious eye irritation
- H335: May cause respiratory irritation

Precautionary Statements:

- P210: Keep away from heat/sparks/open flames
- P261: Avoid breathing vapor or spray
- P280: Wear gloves and eye protection
- P305+P351+P338: IF IN EYES: Rinse cautiously with water
- P501: Dispose of contents/container in accordance with regulations

SECTION 3: Composition / Information on Ingredients

Component	CAS Number	Concentration (%)
Melamine-Formaldehyde Resin	Proprietary	75–80%
Isobutanol (solvent)	78-83-1	15–20%
Free Formaldehyde	50-00-0	≤1.0%

SECTION 4: First Aid Measures

Eye Contact: Rinse cautiously with water for several minutes. Seek medical attention if irritation persists.

Skin Contact: Wash with soap and water. Remove contaminated clothing.

Inhalation: Move to fresh air. If breathing is difficult, seek medical attention.

Ingestion: Rinse mouth. Do not induce vomiting. Get medical help immediately.

SECTION 5: Fire-Fighting Measures

- **Flash Point:** ~32°C (due to isobutanol)
- **Extinguishing Media:** Foam, dry chemical, CO₂, water spray
- **Hazardous Combustion Products:** Carbon monoxide, carbon dioxide,

formaldehyde, nitrogen oxides

- **Protective Equipment:** Wear self-contained breathing apparatus (SCBA) and full protective gear

SECTION 6: Accidental Release Measures

- Evacuate area and ensure proper ventilation
- Wear PPE (gloves, goggles, mask)
- Contain spill and absorb with inert material (sand, vermiculite)
- Prevent entry into drains or waterways
- Dispose of waste in accordance with local regulations

SECTION 7: Handling and Storage

Handling:

- Avoid contact with skin and eyes
- Do not inhale vapors or mist
- Use with adequate ventilation
- Keep away from sources of ignition

Storage:

- Store in **cool, dry, ventilated** areas away from sunlight
- Keep container tightly sealed
- **Shelf life:** 6 months in original packaging

SECTION 8: Exposure Controls / Personal Protection

Exposure Limits (for Isobutanol & Formaldehyde):

Substance	OSHA PEL (TWA)	ACGIH TLV
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Isobutanol	100 ppm	50 ppm
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Substance OSHA PEL (TWA) ACGIH TLV

Formaldehyde 0.75 ppm 0.3 ppm (Ceiling)

Engineering Controls: Local exhaust ventilation recommended.

Personal Protective Equipment (PPE):

- **Eye/Face:** Safety goggles or face shield
 - **Skin:** Chemical-resistant gloves (nitrile, neoprene)
 - **Respiratory:** Use NIOSH-approved respirator in poorly ventilated areas
 - **Other:** Protective clothing, eyewash station access
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SECTION 9: Physical and Chemical Properties

Property	Value
Appearance	Transparent to light-yellow viscous liquid
Odor	Mild chemical (alcoholic)
pH (1:1 solution)	8.0–9.5
Boiling Point	>100°C
Flash Point	~32°C (closed cup)
Viscosity (30°C)	1000–3000 mPa·s
Density	~1.12 g/cm ³
Solubility in Water	Partial
Solubility in Xylene	Partial
Free Formaldehyde	≤1.0%

SECTION 10: Stability and Reactivity

Stability: Stable under normal conditions

Incompatible Materials: Strong acids, oxidizing agents

Hazardous Decomposition: CO, CO₂, NO_x, formaldehyde

Hazardous Polymerization: Will not occur under standard use

SECTION 11: Toxicological Information

Acute Toxicity:

- Isobutanol may cause skin and eye irritation
 - Formaldehyde is a known sensitizer and potential carcinogen (IARC Group 1)
 - Product may cause allergic skin reaction with prolonged exposure
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SECTION 12: Ecological Information

- **Biodegradability:** Partially biodegradable
 - **Aquatic Toxicity:** May be harmful in high concentrations
 - **Mobility in Soil:** Medium (due to partial solubility)
 - **Persistence:** Resin may persist under environmental conditions
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SECTION 13: Disposal Considerations

- Dispose of product and container according to local, regional, and national regulations
 - Avoid release to the environment
 - Do not pour into drains or surface water
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SECTION 14: Transport Information

Regulatory Body	Classification
UN Number	UN1993 (Isobutanol blend)
Proper Shipping Name	Flammable Liquid, N.O.S.
Hazard Class	3 (Flammable Liquid)

Regulatory Body	Classification
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Packing Group	III
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Labels	Flammable
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SECTION 15: Regulatory Information

- **TSCA:** All ingredients listed
 - **REACH:** Compliant
 - **RoHS:** Compliant
 - **SARA Title III:** Formaldehyde listed (reportable)
 - **California Prop 65:** Contains formaldehyde (listed carcinogen)
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SECTION 16: Other Information

Prepared by: Ydnresin Technical Department

Disclaimer: This information is provided in good faith and is based on current knowledge. No warranty is implied. Users must ensure suitability and safety in their own processes and compliance with applicable laws and regulations.