

Low VOC, strong thixotropic air drying resin

80% in De-aromatised hydrocarbon D40

Applications

- thixotropic resin for low VOC decorative trim paints, cat d. VOC < 300 g/L, European Legislation
- VOC 2010 compliant compliant non drip paints
- VOC 2010 compliant stains

Principal properties

- Ease of application
- Suitable for post addition
- Non sagging / non dripping
- tolerant for polar solvents
- accepts up to 10% water

Dilutability

| | |
|-----------------------|----------|
| White spirit | complete |
| Xylene | complete |
| Aliphatic solvents | complete |
| Isoparaffinic solvent | complete |
| n-Butanol | limited |

Compatibility

| | |
|----------------------------|----------|
| Long-oil alkyds | complete |
| Medium-oil alkyds | complete |
| Modified alkyds | limited |
| Linseed stand oil 30 dPa.s | limited |
| Rosin maleic resins | limited |

Recommendations on formulation and use

Urathix AT232 Q-80 can be used in combination with alkyd resins or other solvent borne resins. Due to the high gel strength of Urathix AT232 Q-80 different degrees of thixotropy can be obtained depending on the mixing ratio.

Urathix AT232 Q-80 can be dispersed together with the pigments in the mill base, or added at elevated temperatures as a post addition resin. To obtain non-drip paints it's advised to add 40-50% Urathix AT232 Q-80 on the total resin mixture.

Solvents:

White spirit or aliphatic solvents are the suitable solvents for thixotropic paints. Polar solvents or aromatic solvents will reduce thixotropy. This resin accepts the addition of 10% water to the paint formulation without negative influence.

Storage guidelines

The resin should be stored indoors in the original, unopened and undamaged containers in a dry place at storage temperatures between 5°C and 30°C. Exposure to direct sunlight should be avoided.

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Delivery form:

80% in de-aromatised hydrocarbon D60 possible

Product specifications

| Property | Range | Unit | TM |
|----------------------|---------|----------|-------|
| Colour, Gardner | 0 – 8 | - | 2017 |
| Solids content | 79-81 | % | 2025 |
| Appearance | Clear | - | 2265 |
| Gel strength | 250-400 | g/cm | 2316L |
| Acid value, on solid | 4-12 | mg KOH/g | 2401 |

Other product data

| Property | Value | Unit | TM |
|---------------|-----------|-------------------|------|
| Density, 23°C | appr. 920 | kg/m ³ | 2160 |
| Flash point | appr. 40 | °C | 2800 |

Drier system

For proper drying characteristics it is recommended to use (weight% metal on solid resin):

| | |
|-----------------|-------|
| Calcium drier | 0.1% |
| Cobalt drier | 0.07% |
| Zirconium drier | 0.5% |

Approx. 0.3% anti-skinning agent should be added on formulation.

Shelf life

Under the above mentioned storage conditions the shelf life of the resin will be 6 months ex works.

Material safety

A material safety data sheet of the products is available on request.

Test methods

Test methods (TM) referred to in the tables are available on request.

DSM patented technology

This resin is part of a new technology platform developed by DSM NeoResins+. This technology is based on the by DSM patented Hybrane® technology.

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