



Product Data Sheet Urakyd™ OR311 W-60

Poly urethane modified soya-bean oil

Applications

- furniture lacquers/flooring
- primers for steel
- marine paints

Principal properties

- drying time
- abrasion resistance
- hardness

Dilutability

| | |
|------------------------|-----------|
| Aromatic hydrocarbons | complete |
| n-Butyl Acetate | complete |
| Methyl ethyl ketone | complete |
| Aliphatic hydrocarbons | limited |
| n-Butanol | insoluble |

Compatibility

| | |
|----------------------------|--------------|
| Long oil alkyd resins | complete |
| Medium oil alkyd resins | complete |
| Rosin based esters | limited |
| Cellulose nitrate | limited |
| Cellulose acetate butyrate | limited |
| Linseed stand oil 30 dPa.s | incompatible |

Recommendations on formulation and use

Urakyd OR311 is suitable as a sole binder in clear varnishes for furniture or parquet flooring. By means of suitable flattening agents, silicium dioxide in general, Urakyd OR311 can be easily flattened. Urakyd OR311 has a good stability with reactive pigments, hence suitable for metal effect paints and primers for steel. In combination with long-oil alkyd resins Urakyd OR311 is improving the drying properties.

Test methods

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

Delivery form:

60% in white spirit

Product specifications

| Property | Range | Unit | TM |
|------------------------------|---------|----------|------|
| Viscosity, Falling ball 23°C | 32 - 52 | dPa.s | 2324 |
| Color, Gardner | max. 4 | - | 2017 |
| Solids content | 59 - 61 | % | 2025 |
| Appearance | clear | - | 2265 |
| Acid value, on solid | 0 - 3 | mg KOH/g | 2401 |

Other product data

| Property | Value | Unit | TM |
|-------------------------|-----------|-------------------|------|
| Oil length | 66 | % | - |
| Type of oil | soya-bean | - | - |
| Type of modification | TDI | - | - |
| Free isocyanate content | 0 | % | - |
| Density, 23°C | ca. 930 | kg/m ³ | 2160 |
| Flash point | ca. 36 | °C | 2800 |

Drier system

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

| | |
|---------------|---------------|
| Cobalt drier | 0.002 - 0.01% |
| Calcium drier | 0.05 - 0.1% |
| Zirco drier | 0.3% |

or:

| | |
|--------------|--------------|
| Cobalt drier | 0.02 - 0.03% |
|--------------|--------------|

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.

Shelf life

Under the stipulated storage conditions, the anticipated shelf life is 365 days from last quality control date, as stated in the Certificate of Analysis.

Material safety

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

