

**TYPE**

Isocyanate-modified long-oil alkyd resin based on soya oil

**USES**

In the formulation of hard-wearing wood finishes, parquet sealers, fast-drying synthetic resin coatings and industrial primer surfacers.

**FORM SUPPLIED**

Approx. 55 % in white spirit

**SPECIFICATION**

|   |                  |
|---|------------------|
| <b>Non-volatile content (2 g, 1 h, 125 °C):</b> | 55 ± 1 %         |
| DIN EN ISO 3251                                 |                  |
| <b>Viscosity (23 °C):</b>                       | 1250 ± 250 mPa·s |
| DIN EN ISO 3219/A.3                             |                  |
| <b>Acid value, supply form:</b>                 | ≤ 3 mg KOH/g     |
| DIN EN ISO 2114                                 |                  |
| <b>Iodine color value:</b>                      | ≤ 3              |
| DIN EN 1557                                     |                  |

**OTHER DATA\***

|   |                                |
|---|--------------------------------|
| <b>Oil content, triglyceride, solvent-free:</b> | approx. 61 %                   |
| DIN ISO 6744-4                                  |                                |
| <b>Hydroxyl content, supply form:</b>           | approx. 0,8 %                  |
| DIN 53 240-2                                    |                                |
| <b>Density (20 °C, solvent-free):</b>           | approx. 1,08 g/cm <sup>3</sup> |
| DIN EN ISO 2811-1                               |                                |
| <b>Density (20 °C):</b>                         | approx. 0,92 g/cm <sup>3</sup> |
| DIN EN ISO 2811-2                               |                                |
| <b>Flash point:</b>                             | approx. 36 °C                  |
| DIN EN ISO 1523                                 |                                |

\* These values provide general information and are not part of the product specification.

**PROPERTIES / APPLICATIONS**

**General**

SETAL A U 601 TB is an isocyanate-modified alkyd resin which is especially suitable for the formulation of fast-drying, colourless or pigmented, DIY and decorative paints. The paint films have high mechanical strength, hardness and long-term flexibility. They also have good resistance to water, household cleaning agents and many chemicals.

The use of the following driers is recommended:

- 0.03 - 0.04 % cobalt 6
- 0.60 - 1.00 % zirconium 18
- 0.05 - 0.15 % calcium 4

The metal content is always calculated on the solvent-free resin. Methylethyl ketoxime has proved ideal as an anti-skinning agent for these formulations. The amount required is 0.7 - 1.3 %, calculated on the solvent-free binder. SETAL A U 601 TB can be thinned with the usual solvents. Aliphatic hydrocarbons with small amounts of aromatic and terpene hydrocarbons are especially suitable.

**Wood finishes**

Rapid drying, excellent film hardness, high abrasion resistance and good long-term flexibility make SETAL A U 601 TB ideal for the formulation of parquet sealers, finishes for chairs and benches, coatings for window frames and other coatings for indoor and outdoor use. Because of the good water resistance of coatings based on SETAL A U 601 TB, they are also suitable for use as marine paints. Clear coats based on SETAL A U 601 TB can be matted with standard matting agents. In order to prevent the settling of mineral matting agents, the addition of small amounts of SETAL A U 601 TIX TBA is recommended.

SETAL A U 601 TB has good compatibility with long-oil alkyd resins, e.g. SETAL A F 681. Combination with such resins increases the solids content and thus the potential dry film thickness of the coatings. 4 : 1 combinations of SETAL A U 601 TB and A F 681 can still be matted well.

Coatings based on SETAL A U 601 TB dry to form defect-free films on most tropical woods so no special impregnation is necessary before hand. However, given the many different types of tropical woods and their very different properties, trials should always be carried out.

**Fast-drying DIY and decorative paints**

SETAL A U 601 TB has good compatibility with standard pigments, including alkaline products. Pigmented coatings in which SETAL A U 601 TB is the sole binder are ideal for indoor application. Combination in a 1 : 1 ratio with other long-oil alkyd resins, e.g. SETAL A F 681, yields DIY paints with good impact resistance. Gloss retention and chalking resistance improve with increasing long-oil alkyd resin content.

### Silk-gloss coatings

Pigmented silk-gloss coatings with very short drying times and high mechanical strength can be formulated with SETAL A U 601 TB as the sole binder and in combination with SETAL A U 601 TIX TBA. The coatings can be applied by brushing, rolling, spraying and airless spraying. If larger amounts of thixotropic resins are added, good brushability is still achieved (lap time: 5 - 7 min) despite the short drying time.

### Important

Coatings based on SETAL A U 601 TB can be applied by brushing, rolling or spraying. Spraying must be carried out in water-rinsed spray booths. Spray mists must be regularly removed to prevent ignition.

### SOLUBILITY / THINNABILITY

|                        |           |
|------------------------|-----------|
| Aliphatic hydrocarbons | soluble   |
| Aromatic hydrocarbons  | soluble   |
| Terpene hydrocarbons   | soluble   |
| Alcohols               | insoluble |
| Esters                 | soluble   |
| Ketones                | soluble   |
| Glycol ethers          | soluble   |

### COMPATIBILITY

|   |                   |
|---|-------------------|
| Drying oils   | compatible        |
| Stand oil, cold                                       | compatible        |
| Maleic resin<br>(normal melting temperature)          | partly compatible |
| Maleic resin<br>(high melting temperature)            | partly compatible |
| Phenol-modified resin<br>(normal melting temperature) | partly compatible |
| Phenol-modified resin<br>(high melting temperature)   | partly compatible |
| Non-flexibilised urea resins                          | partly compatible |
| Non-flexibilised melamine resins                      | incompatible      |
| Nitrocellulose  | compatible        |
| Pergut®   | partly compatible |
| Zinc white  | compatible        |

### STORAGE

When stored in its sealed containers at temperatures not exceeding 30 °C, the product will remain stable for at least 365 days.

### LABELING AND REACH APPLICATIONS

This product data sheet is only valid in conjunction with the latest edition of the corresponding Safety Data Sheet. Any updating of safety-relevant information – in accordance with statutory requirements – will only be reflected in the Safety Data Sheet, copies of which will be revised and distributed. Information relating to the current classification and labeling, applications and processing methods and further data relevant to safety can be found in the currently valid Safety Data Sheet.