

TYP

Short-oil alkyd resin based on saturated fatty acids

USES

- automotive top coats (OEM)
- coatings for household appliances

The resin has excellent film and mechanical properties and is weather-stable and resistant to yellowing and acids

FORM SUPPLIED

Approx. 60 % in solvent naphtha 100

SPECIFICATION

Non-volatile content (2 g, 1 h, 125 °C):	60 ± 1 %
DIN EN ISO 3251	
Viscosity (23 °C):	4450 ± 550 mPa·s
DIN EN ISO 3219/A.3	
Acid value, supply form:	8 ± 2 mg KOH/g
DIN EN ISO 2114	
Iodine color value:	≤ 3
DIN EN 1557	

OTHER DATA*

Oil content, triglyceride, solvent-free:	approx. 31 %
DIN ISO 6744-4	
Phthalic anhydride, solvent-free:	approx. 43 %
DIN ISO 6744-2	
Hydroxyl content, supply form:	approx. 1.1 %
DIN 53 240-2	
Density (20 °C, solvent-free):	approx. 1.14 g/cm ³
DIN EN ISO 2811-1	
Density (20 °C):	approx. 1.02 g/cm ³
DIN EN ISO 2811-2	
Flash point:	approx. 45 °C
DIN EN ISO 1523	

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

PROPERTIES / APPLICATIONS

SETAL A F 310 SN compatible with standard commercial urea and melamine resins. However, given the number of different amino resins on the market, it is always advisable to test compatibility in each individual case.

With an alkyd resin/amino resin ratio of 75 : 25 to 70 : 30 (calculated on solid resin), optimum film properties are yielded by stoving for 30 min at 120 - 130 °C.

For an alkyd resin based on saturated fatty acids, SETAL A F 310 SN is extremely reactive. Its high resistance to yellowing during overbaking allows a very wide stoving range of 100 - 200 °C. This resin yields high-bodied and haze-free films. The coatings can be applied with standard equipment.

Weather resistance

Weathering test results show that gloss retention and chalking resistance are good, even in subtropical conditions.

Stability

To ensure the stable viscosity of the product in combination with amino resins, it is advisable for safety reasons to use alcohol solvents.

SOLUBILITY / THINNABILITY

Aliphatic hydrocarbons	partly soluble
Aromatic hydrocarbons	soluble
Terpene hydrocarbons	soluble
Alcohols	partly soluble
Esters	soluble
Ketones	soluble
Glycol ethers	soluble
Glycol ether esters	soluble

COMPATIBILITY

Stoving SETAL resins	compatible
Wax-free saturated polyesters	partly compatible
Non-flexibilised urea resins	compatible
Non-flexibilised melamine resins	compatible
Nitrocellulose	compatible
Epoxy resins (low molecular weight)	compatible
Cellulose acetobutyrate	partly compatible

STORAGE

When stored in its sealed containers at temperatures not exceeding 30 °C, the product will remain stable for at least 730 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.