

TYPE

Tough but flexible unsaturated wax-free polyester resin

USES

In the formulation of clear and pigmented UV-curing top coats with very good flow properties for application by spraying and curtain coating.

FORM SUPPLIED

Approx. 70 % in styrene

SPECIFICATION

Non-volatile content (1 g, 1 h, 125 °C):	70 ± 1 %
DIN EN ISO 3251	
Viscosity (23 °C):	650 ± 100 mPa·s
DIN EN ISO 3219/A.3	
Acid value, supply form:	17.5 ± 2.5 mg KOH/g
DIN EN ISO 2114	
Hazen colour value:	≤ 150
DIN EN 1557	

OTHER DATA*

Density (20 °C):	approx. 1.11 g/cm ³
DIN EN ISO 2811-2	
Flash point:	approx. 34 °C
DIN EN ISO 1523	

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

PROPERTIES / APPLICATIONS

After the addition of photo-initiators, ROSKYDAL 300/1 can be cured under UV lamps.

When using high-pressure mercury vapour lamps with a capacity of 80 - 120 W/cm lamp length, standard commercial initiators can be used. However, their suitability for the intended application should be tested, especially with respect to storage stability, reactivity and yellowing.

The use of 2.5 % Irgacure 1700¹ or Irgacure 651¹ is recommended for clear coats (max. application rate: 250 g/cm²). In the case of top coats, Borchigol PL² should be used to promote the flow properties. The addition of 2 % of a 1 % solution in toluene is recommended. Pigmented coatings should be formulated using 2 % Lucirin TPO¹ or other suitable photoinitiators. All the quantities given are calculated on the resin supply form.

Clear coats may contain soluble dyestuffs and highly disperse silicas.

Primers are formulated using highly disperse silicas and quartz powder. Soluble dyestuffs may also be added. The addition of 5 - 10 % Desmodur L or Desmodur N improves the adhesion. However, such combinations have a limited pot life (approx. 24 hours with a 5 % addition of Desmodur L).

Primer surfacers contain transparent extenders, highly disperse silicas and possibly soluble dyestuffs. They are formulated in dissolvers or butterfly mixers. If a triple-roll mill is used, the storage stability may reduce through contamination with abraded metal particles.

Especially in the case of pigmented coatings (max. application rate: 150 g/m²), the details on pigments, initiators, application and curing given in our guide formulations should be observed. The coatings can be pre-gelled using special high-pressure lamps or special fluorescent lamps, e.g. Philips TL 03.

ROSKYDAL 300/1 is normally used as the sole binder. If made necessary by the application and compatibility exists, it can be flexibilized with other ROSKYDAL grades, e.g. ROSKYDAL 550 or ROSKYDAL E 70.

¹ BASF

² Borchers

STORAGE

When stored in its sealed containers at a temperature not exceeding 23 °C, the product will remain stable for at least 270 days.

SOLUBILITY / THINNABILITY

Alcohols	partly soluble
Aliphatic hydrocarbons	insoluble
Esters	soluble
Ketones	soluble
Toluene, Xylene	partly soluble

COMPATIBILITY

ROSKYDAL 500 A	compatible
ROSKYDAL 502	compatible
ROSKYDAL 550	compatible
ROSKYDAL 620	compatible
ROSKYDAL E 70	compatible

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.