



Solmer

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Urethane acrylate dispersion

SW 5200

Descriptions

Urethane acrylate dispersion (SW 5200) is used for the manufacture of aqueous radiation-curing coatings for wood, wood products as primer and top coating. These are characterized by their good reemulsification properties. Form supplied is approximately 40% dispersion in water.

Features

- It is possible to reuse SW 5200 after freezing.
- Excellent adhesion for wood and wood products.
- Low viscosity.
- Easy to make formulation.
- High flexible and improved toughness.
- Fast curing and very good wetting properties.
- Environment-friendly product.
- Good clarity and scratch resistance.

Applications

SW 5200 is used for manufacturing UV curable paint for wood, wood products and paper. Addition of 1~1.5% by wt. photo initiator, calculated on the solid binder, have proven to be suitable for initiating the curing reaction.

Coatings based on SW 5200 are noted for their high toughness and good adhesion between substrate and sealer. As with any product, use of SW 5200 in a given application must be tested in advance by the user to determine suitability.

Typical Properties

Properties	Value
Appearance	Slightly colloidal, milky
pH	6.0 ~ 8.0
% Solid	AP 40
viscosity@25°C	<300
Specific Gravity @25°C	1.05

Application method

- Clear and pigmented wood coating (primer and top).
- Method: roll, spray and curtain coating.
- Substrate: wood, wood products.
- Thickness: 15~20g/ m²
- Reactivity: 9~10m/min x 80W/cm x 1lamp
- Curing condition: Flash off: 70~80°C X 1~2min or 50~60°C X 2~4min
(For evaporating water)
- Application method: Direct roller coater

Guide formulation

SW 5200	:	100
IRGACURE 500	:	0.6
Thickener	:	0.2~0.5
Additives	:	0.2~0.5
(Deformer	:	0.2)
(Wetting agent	:	0.1~0.3)

It is possible to add additives and dyes in the formulation.

A photo initiator must be added to SW 5200 for curing. Liquid products like Lucirin TPO-L or Irgacure 500 are suitable for this purpose.

The viscosity is adjusted by the addition of thickeners. (BYK 425)

Handling

- Storage:
- Avoid continuous staying over than 40°C.
 - Handle with care and avoid unnecessary personal contact.
 - Avoid contact with eyes and prolonged or repeated skin contact.
 - Avoid continuous or repetitive breathing of dust.