



The Chemical Company

SONNEBORN® PREMIUM ADHESIVE

High Performance Adhesive

Description of Product

SONNEBORN® PREMIUM ADHESIVE is a polyurethane based single component high performance adhesive used in adhesion of all kinds of rigid structure materials.

Fields of Application

- In inner and outer areas, in vertical and horizontal applications.
- In adhesion of materials like metal, aluminum, wood, ceramic, marble, concrete, fiberglass, and styrofoam to each other.
- In decoration, stand design, and all types of repair works.
- As adhesive in wood and furniture sector.

Features and Benefits

- Single component
- Environment friendly.
- Non-flammable.
- Due to its perfect performance, 3 times more stronger than conventional adhesives and cures quickly in one night.
- High coverage and economical.

- Resistant to water and excessive temperature changes. Adhesive between -15°C and +121°C.
- Non-toxic.
- Does not contain solvent. Consistent with VOC (Volatile Organic Compound) limitations.

Application Procedure

Preparation of Substrate

Surfaces have to be strong, dry, bearing, dustless, clean, and also in balance and smooth. Surface must be cleaned off all kinds of oil, grease, rust, and paraffin traces that can weaken adherence and no loose particles must be present. The surface to be applied must have the capacity to bear the weights of the objects to be adhered.

Application Method

SONNEBORN® PREMIUM ADHESIVE is put into suitable cartridge gun and its nozzle is cut appropriately for usage type. Afterwards, separating safety diaphragm, found in the cross-section where nozzle and cartridge are connected, is punctured by a thin-tip screwdriver from a few places, and **SONNEBORN® PREMIUM**

Technical Data

Structure of the Material	Polyurethane
Color	Light Brown
Solid Substance Ratio	90%
Density	1.30 kg/liter
Viscosity	1.000.000 cps
Contraction Value	Non-contracting
Flash point	+121°C
Service Temperature	+15°C +110°C
Usage Period	1 hour

Obtained in +23°C, 50% relative humidity conditions. Higher temperatures decrease the time, lower temperatures increase the time.



SONNEBORN® PREMIUM ADHESIVE

ADHESIVE becomes ready to use. Adhesive is applied on the application surface and spread homogenously by a spatula until minimum thickness is obtained. Surfaces have to be fixed by mechanic apparatus until **SONNEBORN® PREMIUM ADHESIVE** hardens completely.

Coverage

200 - 400 g/m² depending on surface absorption and roughness.

Watchpoints

- Working and reaction time of resin based systems are affected by environment and ground temperature, and relative humidity in the air. Low temperatures slow down the chemical reaction, and increase working period, coating time, and work time. Also coverage decreases because viscosity increases. High temperatures accelerate the chemical reaction and times stated above are reduced depending on this. For the material to complete its curing, environment and ground temperatures must not fall down below the minimum allowed value.
- **SONNEBORN® PREMIUM ADHESIVE** may not be used in adhesion of glass, mirror, bitumen and paraffin containing materials.
- Perform an adhesion trial on a small area for risky surfaces of adhesion.
- Use gloves during the application.

Cleaning of Tools

All the tools and equipments must be cleaned by appropriate solvent after the application. After **SONNEBORN® PREMIUM ADHESIVE** is hardened, it can only be removed from the surface mechanically.

Packaging

313 ml. cartridge.

Storage

Must be stored in unopened original packing, and away from direct sunlight and moisture. In short-term storing, maximum 3 palettes can be

stowed on top of each other and delivery has to be according to first in first out system. In long-term storing, the palettes must not be stowed on top of each other.

Shelf Life

12 months after the production date under appropriate storing conditions. Opened packages have to be stored under appropriate storing conditions, and must be used in one week.

Health and Safety Precautions

Approaching warehousing and application areas by fire is hazardous. Warehousing and application areas have to be ventilated.

Work cloth, protective gloves, goggles and masks concordant with Work and Worker Health rules must be used during the application. Due to irritant effects of the non-cured material, avoid contact to skin and eyes during storing and application. If such a contact occurs, it must be washed by soap and plenty of water. Consult a physician urgently if swallowed. Food and drink must be kept outside the application areas. Must be stored away from children. Please look at the Material Safety Data Sheet for detailed information.

Disclaimer

This information given here is true, represents our best knowledge and is based not only on laboratory work, but also on field experience. However, BASF Yapı Kimyasalları San. A.S. is only responsible from the quality of the product. BASF Yapı Kimyasalları San. A.S. cannot be hold responsible from the results caused by applications of the product not in accordance with the written suggestions of how and where to use the product and/or faulty applications. This technical document is valid until a new one is printed and abates the previous editions. 01/2008.

SONNEBORN® PREMIUM ADHESIVE

COMPARISON OF ADHESIVES FOR RESISTANCE TO CUTTING (kg/cm²)

	SONNEBORN® PREMIUM ADHESIVE (Does not contain water and solvent)		Solvent containing adhesive		Water containing adhesive	
	24 hours	7 days	24 hours	7 days	24 hours	7 days
Plywood - Fir	38,10	60,40	3,70	20,00	5,30	19,40
Plywood - Processed Timber	60,60	70,40	2,10	18,00	4,60	19,70
Metal - Fir	22,00	22,00	8,40	8,40	2,10	7,90
Foam - Foam	2,60	2,60	0,80	2,60	1,30	1,50
MDF - MDF (wet)	24,90	38,30	7,80	4,90	2,10	13,60
Wet Fir - Metal	15,30	22,00	5,60	8,20	0,90	2,00
Frozen Fir - Frozen Fir	25,30	58,30	3,54	7,70	0	6,30
Plywood - Chipboard	7,00	15,60	3,90	6,90	1,10	2,30

COMPARISON OF ADHESIVES

	SONNEBORN® PREMIUM ADHESIVE (Does not contain water and solvent)	Solvent containing adhesive	Water containing adhesive
Meeting VOC Requirements(*)	Yes	No	Yes
Environmental Safety Class	A	F	D+
Conformity to All Processed Pavement Types and Structure Codes	Yes	No	No
Special Storage	No	No	Yes
Workability Under The Freezing Point	Perfect	Weak	Impossible
Flammability (When contacted with fire)	+121°C (explodes)	0°C (explodes)	+43°C (explodes)
Temperature Resistance	+110°C	+88°C	+82°C
Toxicity Level Usage up to 1 hour Without	Non-toxic	Can only be used under ventilation	Can only be used under ventilation
Losing its Resistance	Yes	No	No
Contraction	Non-contracting	35 - 40%	35 - 40%
Chemical Resistance	High	Normal	Normal

(*) VOC: Volatile Organic Compound

