

Solvent-Based / Water-Based Adhesives

Contact Adhesives with Good Initial Strength

Solvent-Based Adhesives

Solvent-based adhesives (polychloroprene) are formulated with different raw material groups including natural and synthetic rubbers and suitable resin combinations (naphthas, ketones, esters or aromatics). Adhesive films are formed upon evaporation of the solvents. Assemblies may be made by contact bonding (adhesive application to both surfaces) or wet bonding (applied to one of the bond faces).

Most the contact adhesives are based on polychloroprene rubber. They exhibit good initial strength and achieve high strengths on various substrates.

TEROSON SB 2444

TEROSON SB 2444 can be applied by brush and spatula. It is used to bond rubber to different surfaces e.g. metal, wood, and to itself. TEROSON SB 2444 offers high initial bond strength and contactability. The bondline is flexible and provides good heat resistance.

TEROSON SB 2140

TEROSON SB 2140 is a solvent-based contact adhesive based on polychloroprene. The product exhibits good high-temperature strength and the ability to bond various substrates to one another. TEROSON SB 2140 is suitable for spray application and is particularly effective when bonds have to withstand temperatures up to 120°C.



Water-based products with improved bonding characteristics

Water-based or “dispersion” adhesives contain insoluble resins which are finely distributed as solid particles in water. These adhesives cure on evaporation of the water. Crosslinking of the dispersed particles is achieved as a result of added mainly basic catalysts. This greatly improves the resistance of the bonded joint to water and heat.

As a rule, dispersion adhesives do not contain solvents or other problematic chemicals, they are not harmful to the environment and are less critical with regard to health and safety at work. Dispersion adhesives are applied by means of rollers or hand guns. The curing speed of the adhesives can be accelerated through the application of heat and air ventilation.

AQUEUCE FB 7088

AQUEUCE FB 7088 is a water-based dispersion. It is used for bonding plasticised PVC films and painted surfaces to paper and cardboard. It also exhibits good bonding properties on aluminium coated PVDC-coated surfaces and polystyrene films.

AQUEUCE ENV 1626

AQUEUCE ENV 1626 is a water-based dispersion based on acrylic ester. It is a highly concentrated, fast-setting dispersion adhesive and therefore suitable for high line speeds. AQUEUCE ENV 1626 is a pressure-sensitive adhesive suitable for paper, fabric and plastics films/sheets, for coating aluminium and plastic signboards, screens and indicating dials for the electrical/recording industries, and for bonding aluminium foil to aluminium sheet.



Solution

Solvent-based adhesive

Water-based adhesive

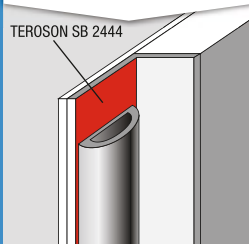
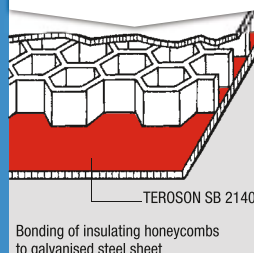
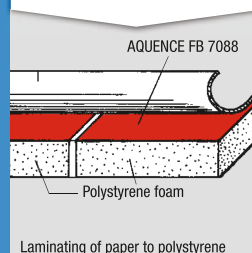
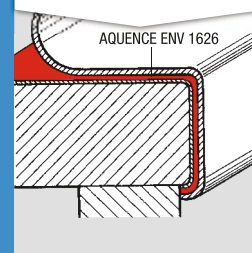
Hand application

Spray application

Tack-free

Pressure-sensitive

High strength

TEROSON
SB 2444TEROSON
SB 2140AQUEUCE
FB 7088AQUEUCE
ENV 1626

Chemical base	Polychloroprene	Polychloroprene	Dispersion	Acrylic dispersion
Solids contents	Approx. 30%	15 – 18%	57 – 61%	65.5 – 68.5%
Viscosity	Approx. 3,000 mPa·s	Approx. 140 – 300 mPa·s	4,000 – 6,000 mPa·s	2,000 – 3,400 mPa·s
ph value	–	–	3 – 5	6 – 8
Service temperature range	-30°C to +90°C (100°C)	-30°C to +120°C (130°C)	–	–
Usage	150 – 300 g/m ²	150 – 250 g/m ²	–	–
Density	Approx. 0.89 g/cm ³	0.78 – 0.88 g/cm ³	–	Approx. 1.0 g/cm ³
Colour	Beige	Beige	White	White
Pack sizes	340g, 5kg	Not available in U.K.	Not available in U.K.	28kg

Handy Hints

Solvent-based

- To improve adhesion on rubber, it's recommended to bond on roughened surfaces.

Water-based

- Tools can be cleaned with water.

TEROSON SB 2444

- Good adhesion to rubber
- High strength
- High contactability

TEROSON SB 2140

- Good sprayability
- High temperature resistance

AQUEUCE FB 7088

- Good adhesion to plasticised PVC and polystyrene foils
- Soft elastic dry film

AQUEUCE ENV 1626

- Good surface tackiness
- High cohesion