



CONTACT 651

Description

CONTACT 651 is a superior all-purpose brush grade Polychloroprene based contact adhesive. It bonds instantly on contact to a wide variety of surfaces without clamping or sustained pressure. It is especially suitable for bonding of decorative laminates to particle board, and can be used for non-structural bonding of wood, metal, rubber, leather, canvas and a variety of other porous and non-porous surfaces.

Features and benefits

- Excellent initial grab - no need for clamping
- High immediate bond strength - jobs can be finished quickly
- Excellent adhesive properties - bonds a wide variety of similar and dissimilar substrates
- Good brushability - easy to apply
- Good water resistance - suitable for exterior applications
- Good heat resistance - bonds resist temperatures up to 75°C
- Long green time - time to prepare and align surfaces to be bonded

Applications

CONTACT 651 is ideal for flat and postforming bonding of decorative laminates to particle board in cabinet making and shopfitting applications. Suitable as a general purpose adhesive for leatherwork and in the furniture industry.

Adhesion

Processed boards (e.g. hardboard, supawood, chipboard, high pressure laminates, masonite, plywood), formica, veneers, wood, floor coverings, urethane foam, canvas, textiles, leather, felt, cloth, concrete, linoleum, glass, metal, rubber, cork and some plastics

Limitations

- Not recommended for use as a structural adhesive.
- Not suitable for polyethylene, polypropylene, expanded polystyrene, Teflon, and flexible, highly plasticized PVC, or bitumen backed PVC tiles.
- Not suitable for applications requiring heat resistance above 75°C.

Safety instructions

CONTACT 651 is flammable; keep away from naked flames and ignition sources. As solvent vapors are narcotic, it is recommended to work in a well ventilated area. Do not breathe in vapors. For unventilated areas, a NIOSH approved respirator will be necessary. When working with the product, it is advisable to wear gloves and safety glasses in order to avoid direct contact with the skin or eyes. If product comes in contact with skin or eyes flush thoroughly and immediately with water. If irritation continues, seek medical attention. Refer to our Safety Data Sheets for further toxicological information and comprehensive handling instructions.

Surface preparation

- The surface must be clean, dry, and free of loose materials, dust, dirt, oil, rust and any other contaminants. Metal surfaces should be degreased with a solvent such as acetone.
- Poor surface preparation may result in glue failure.

Instructions for use

- Ensure that surfaces are prepared as above and ensure that the temperature of the surfaces to be bonded is above 18°C.
- Stir adhesive before use
- Apply ALCOLIN CONTACT ADHESIVE to **both** surfaces evenly with a fine serrated trowel or a stiff brush, covering the entire joint area. 80% coverage can be applied to the body of the substrate, but 100% coverage must be applied to the edges. A spread rate of approximately 2m² per liter should be achieved for double sided application.
- To tell if you have applied enough adhesive, when the adhesive is dry and ready to bond, the adhesive should have a uniform glossy appearance with light reflecting on it. Any dull area indicates insufficient adhesive from not applying enough, soak-in, or a combination of both. Dull areas should be reapplied and allowed to dry. Usually porous surfaces will require more adhesive.
- For effective bonding on absorbent surfaces and porous material e.g. edges of chipboard, apply two coats. The first coat will act as a sealer preventing excessive absorption of the second coat into the substrate. Apply the second coat only after the first has dried. It is not recommended to apply one heavy coat of contact adhesive to porous materials. Contact adhesives dry from outside in, form a skin which can fool you into believing that the adhesive is dry and ready for bonding. This can lead to solvent entrapment, and bubbling and or edge lifting as the solvents try and escape.
- Allow both surfaces to dry until touch dry (i.e. no adhesive is transferred to the back of a finger when touched – do not test using front part of your hand due to the oiliness). The time taken for the adhesive to be touch dry is known as the Open time. The Open time of ALCOLIN CONTACT ADHESIVE is approximately 5 to 10 minutes under normal room temperature conditions (23°C). Conditions of high humidity and low temperature will extend Open Time, while conditions of low humidity and high temperature will shorten this time.
- After the surfaces are touch dry, they must be brought together before the adhesive loses its “contactability”. This time is known as the Green Time. For ALCOLIN CONTACT ADHESIVE, the Green Time is approximately 40 minutes. The surfaces to be bonded must be brought together within this Green Time for a strong bond to be formed.
- Carefully align the two surfaces before bonding, since no adjustment is possible after the adhesive films have made contact. Spacers, such as dowels or strips of laminate, may be used to help prevent premature adhesive/adhesive contact and bonding prior to positioning.
- Slide out of the spacers and apply firm uniform pressure to the whole surface for a few seconds to create an instantaneous bond. A pinch roller or a J roller (8cm rubber roller with metal handle) is recommended. Apply a minimum pressure of 30 psi. The stronger the pressure, the better the bond.
- Full strength is achieved after 24 hours, however, bonded assemblies can be machined or trimmed immediately after bonding.

Application note

If working under conditions of high relative humidity (above 50%), a condition known as “blushing” can affect solvent based contact adhesives. The “blush” is caused by rapid evaporation of the solvents which causes condensation on the surface. After applying the contact adhesive, place your hand underneath the high pressure laminate (the decorative face) – if it feels wet, there is moisture on the glue line as well. Blushing is further indicated by a colour change in the glue line. A clear adhesive will turn cloudy. The condensation causes a barrier between the two glue lines. If it is not removed before making the bond, one will get a false initial bond, which will cause bubbling and delamination once the water evaporates off. To avoid blushing, it is best to keep surfaces at or above room temperature during the gluing operation.

Consult your Alcolin Rep for more information on troubleshooting with contact adhesives

Cleaning

- Machines, applicators and spray equipment can be cleaned with suitable solvents such as toluene, acetone, MEK, or thinners immediately after use.
- It is recommended to regularly coat areas where adhesive contamination can be either detrimental or unsightly on the equipment with ALCOLIN RELEASE AGENT. The release agent will prevent the adhesive from sticking to the equipment and will help dried glue to flake off quickly and easily.
- Effluent should be dealt with as per local regulations and if none exists, it is recommended to mix the effluent with sawdust and dispose of when dried.

Storage stability

CONTACT 651 has a shelf life of at least 12 months if stored in a cool (below 25°C), dry place in its original moisture-tight container. If the material is kept beyond the recommended shelf life, it is not necessarily unusable. A check should be performed to observe whether the product has not separated, thickened, or shows signs of bacterial degradation (bad smell, discoloration and low viscosity). To maximize the shelf life of the opened container, ensure that the packaging is closed to create an airtight environment when not in use. If the package is left open for long periods, the glue will thicken due to solvent evaporation. It is recommended to stir product before use to ensure even consistency.

Product packaging

- 25L jerry
- 200L drums
- 1000L bulk container

Physical data

Type	Neoprene / polychloroprene adhesive
Appearance	Creamy yellow liquid drying to a tough, elastic yellow film
Density	Approximately 0.85g/cm ³
Solids	Approximately 20%
Viscosity	Approximately 2500cPs

Application data*

Application temperature	18°C to 35°C
Clamping pressure	Minimum 2kg/cm ² (30psi)
Coverage	Approximately 2m ² per litre (double sided appl.)
Open time (solvent flash off time)	5 - 10 minutes (ambient conditions)
Green time	40 minutes (ambient conditions)
Full cure	After 24 hours

**Please refer to "Instructions for Use" section for further details*

Performance data

90° Peel (leather – chipboard)	3.4N/mm
Wood to wood – tensile (beech wood)	2.6N/mm ²
Heat resistance	~75°C
Water resistance	Good

The above information is only offered, as a guide to the use of this product. Furthermore, users should satisfy themselves that it is suitable for their needs. Since we have no control over the conditions under which it is used, we cannot accept responsibility for problems caused by the use and/or application of this product.

Head Office: +27(0)21 555 7400
1 Beverley Close, Montague Gardens
PO Box 37008, Chempet, 7442
www.alcolin.com