

ALPHA DP007

GENERAL PURPOSE HYBRID ADHESIVE



PRODUCT INFORMATION

Alpha DP007 Hybrid Adhesive is a high performance, flexible and stable single component thixotropic adhesive based on hybrid polymer technology. It is a single part, moisture-cure adhesive that requires no mixing or activating and provides excellent adhesion properties.

Alpha DP007 Hybrid Adhesive is used for general purpose bonding on a wide variety of materials as well as for a wide range of applications. It is also approved for use on Pilkington Active Glass.

KEY INFORMATION

- **Multi-purpose adhesive**
- **Single component – no need to mix and easy to use**
- **Isocyanate, solvent and silicone free**
- **Suitable for bonding glass and mirrors (in accordance with DIN Regulation 1238)**
- **Good resistance to tear and to weather**
- **Elastic compound which accepts movement**
- **Excellent resistance to chemicals & seawater**
- **Can be over painted when fully cured (in accordance with DIN Regulation 52452 Part 4)**

TYPICAL APPLICATIONS

Alpha DP007 Hybrid Adhesive is suitable for the following applications:

- Boat / ship building (decks, floors, panels etc.)
- Automotive industry (car body assembly, buses, containers etc.)
- Window and door frame perimeter joints.
- Vehicle conversion, caravans.
- Construction and building joints including floor and concrete joints.
- Bonding applications in metal constructions and for mounting vibrating parts.
- Good adhesion to many substrates (including PVC, EPDM, glass, wood, stone)
- Bonding and sealing of glass and other transparent materials

PRODUCT CHARACTERISTICS

Property	Data
Colour	Black, White, Grey
Base	Hybrid polymer
Consistency	Thixotropic Paste
Specific Gravity (20°C)	~1.40 (White/Black/Grey)
Skin Formation Time (20°C and 50% RH)	approximately 15 to 30 minutes*
Cure Rate (20°C and 50% RH)	~3 mm / 24 hours*
Temperature Resistance	-40°C to +90°C
Application Temperature	+5°C to +40°C
Compatibility with Paint (after curing)	Water based paints: Yes Solvent based paints: Testing required
Coverage (per 290ml cartridge)	15 metres (5mm bead) 3 metres (10mm bead)

*This time is shorter when temperature and relative humidity are higher. It is absolutely necessary to make sure that open time is not excessive. Otherwise, defective bonding could happen.

PRODUCT PERFORMANCE

The performance data presented here has been determined by Alpha Adhesives & Sealants Limited standard test methods and are average values that should not be used for specification purposes. Our recommendations on the use of this product are based on tests believed to be reliable. It is advised that users conduct their own tests to determine the suitability of the product for their specific application. Please note this product is not recommended for substrates like PE, PP, Teflon.

Test	Substrates	Results/Observations
Elongation at Break (ISO 37)	N/A	>100%
Tensile Strength (ISO 34)	N/A	>2.0 N/mm ²
Hardness	N/A	~50 Shore A (White/Black/Grey) ~40 Shore A (Clear)
Shear Adhesion Strength	Mild Steel to Mild Steel	>1.0 N/mm ²
Shear Adhesion Strength	PVC to PVC	>1.5 N/mm ²
Shear Adhesion Strength	Wood to Wood	>3.0 N/mm ²
Shear Adhesion Strength	GRP to GRP	>2.5 N/mm ²
Sag Resistance (ISO 7390)	N/A	<3 mm
Water and Salt Spray Resistance	N/A	Good
UV Resistance	N/A	Good

HANDLING & APPLICATIONS

The general application information presented here is based upon typical conditions determined by Alpha Adhesives & Sealants Limited's own testing. Our recommendations on the use of this product are based on methods believed to be reliable. It is advised that users conduct their own tests to determine the suitability of the product for their specific application.

Process Step	Guidelines
Surface Preparation	All substrate surfaces should be cleaned of any dust, grit, loose material, wax, grease and oil using Alpha Cleaner T559 TF.
Adhesive Application	Application Method: 1. Joint edges should be protected using masking tape. 2. Cut the tip of the nozzle at a 45° angle to give a slightly larger hole than the gap that has to be filled. 3. Alpha DP007 Hybrid Adhesive can be applied by a pneumatic or hand gun under a uniform pressure to extrude a continuous smooth bead. 4. After application, the adhesive can be finished by using a wet spatula. The tape should be removed as soon as possible before formation of a skin.
Curing	The rate of cure in the joint is dependent on the ambient conditions, the assembled joint arrangement and the depth of the adhesive between the joint faces.
Cleaning	Clean tools immediately after use with Alpha Cleaner T559 TF. Clean hands with a proprietary hand cleaner.

HEALTHY & SAFETY INFORMATION

Alpha DP007 Hybrid Adhesive is classified as non-hazardous according to Directive EC 1272/2008. Please refer to the Alpha DP007 Hybrid Adhesive Safety Data Sheet for further health & safety information.

STORAGE

Alpha DP007 Hybrid Adhesive should be stored in its original container, in dry conditions and at temperatures between 5°C and 20°C. Alpha DP007 Hybrid Adhesive will keep satisfactorily for up to 12 months from date of manufacture if stored according to the recommended conditions.

PRODUCT AVAILABILITY

Product Reference	Pack Size	Container	Box Quantity
Alpha DP007 Hybrid Adhesive (all colours)	290 ml	Cartridge	12

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