

TECHNICAL DATASHEET

ASCOTITE

2-Part, High Strength Multipurpose Epoxy Adhesives



PRODUCT INTRODUCTION

ASCOTITE is a high-strength, solvent free, fast curing 2-part medium viscous epoxy adhesive for bonding small or medium areas of different kinds of substrates like metal, wood, concrete and stone etc. It is an ideal product for bonding most materials together.

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KEY FEATURES

- 1. Easy to apply
- 2. Bonds a wide variety of materials
- 3. Excellent resistance to static and dynamic loads
- 4. High mechanical resistance
- 5. Excellent bond and tensile strengths
- 6. Solvent free

RECOMMENDED APPLICATIONS

- 1. Metals
- 2. Wood/timber products
- 3. Natural & artificial stone, Marbles
- 4. Concrete
- 5. Ceramic
- 6. Glass, composite

TECHNICAL PROPERTIES (ASTM D 6380,EN 12004,ISO 13007 (R2T), ANSI A118.3(5.5 TO 5.8)

Chemical Base	Epoxy resin & polyamide hardener
Appearance/Color	Pale Yellow / Clear
Mixing Ratio	Resin: Hardener = 1.0: 0.8 (by weight); 1:1(By volume)
Mixing Consistency	Non sagging (Thin coat) (0.05 to 0.25 mm)
Density	1.2 ± 0.1 Kg/l
Workability	30 ± 5 minutes
Pot Life	55 ± 5 minutes
Setting time	up to 4 hours
Compressive Strength	55 ± 2 N/mm² @ 7 days
Tensile Strength	15 ± 2 N/mm² @ 7 days
Pull out adhesion	(A) 4 hours : 1.50 N/mm ²
	(B) 24 hours :3.00 N/mm ²
Shear Strength (Marble to concrete)	6 ± 0.5 N/mm² @ 7 days.
Flash Point	>200 °C Resin and >120 °C
	Hardener
Hardness, Shore D	80

Hardness, Shore D

The values obtained are from laboratory testing conditions and at $27 \pm 2^{\circ}C$. On site tests may show slight variation dueto site conditions and/or methods of testing/application. Follow company TDS to obtain best results.





APPLICATION METHODS:

1. Surface Preparation

The substrate must be clean, dry, sound and free of all contamination such as dirt, oil, grease, & coatings etc. which hinder an adhesion.

In many cases, surface roughening prior to bonding improves strength of bonded joint. It is generally advised when working with rubber and metals. Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.

2. Mixing

Only mix the amount of material that can be used within the pot life. The resin and the hardener need to be mechanically mixed before use in the ratio of weight and/or volume in compliance with technical specifications until a homogeneous color is reached.

3. Application

It can easily applied with spatula or putty knife. A layer of adhesive should be 0.05 to 0.25 mm thick will normally impart the greatest lap shear strength to a joint. Apply Debs evenly spreaded on the back side of the stone or tiles minimum 5 to 6 debs required (one in each corner and one at the center). Minimum 10 percent of the total bonding area needs to cover and thickness 10 mm to 25 mm needs to be maintain.

4. Limitations

- i. Not suitable where a flexibility is required.
- ii. Not suitable for temperature above 80°C.
- iii. Does not perform well to some plastics such as polyethylene, polypropylene, etc.
- iv. Marine ply, Fire ply, Hardwood surface, Slate, sandstone not recommended to bond.

5. Cleaning

Excess of product can be removed with suitable solvent based cleaner compatible with the substrates to bond. Application tools and dosing systems shall be cleaned before the product is hardened. Cured product can be removed only mechanically. Tools and equipment should be cleaned immediately after use with appropriate solvent.



6. Packaging

Available in 450 gm, 0.9 Kg & 1.8 Kg Set

7. Coverage

50 - 52 ft²/Kg for even substrates with 200μ Thickness.

8. Storage & Shelf Life

Store in cool and dry warehouse condition. Do not expose to direct sunlight.

ASCOTITE epoxy adhesive components should be stored in their original, sealed containers at room temperature. Shelf life in these conditions is 12 months in unopened original containers.

DISCLAIMER:

While the technical details & recommendations contained in this document and the Related details given by the representatives of the company correspond to the best of our knowledge & experience, all the above information must in any case be considered as merely indicative and subject to confirmation. Users are recommended to conduct a product suitability test before it is used at full scale. In any case, the consumer alone is entirely liable for any consequences resulting from using the product. For the most up-to-date TDS, please visit our website at www.ascolite.in. Our company policy is one of ongoing R&D; therefore, we reserve the right to update this information without prior notice at any time. As the correct identification of the problems, the quality of other materials used, on-site environmental conditions and the workmanship on-site are factors beyond our control, there is no express or implied guarantee/warranty as to the results achieved. The company assumes no liability or consequential damage arising from the use of our products for unsatisfactory results. Site visits are not a supervisory responsibility wherever provided. Suggestions made either verbally or in writing by the company may be followed, modified or rejected by the owner, engineer or contractor, since they are solely responsible for carrying out procedures appropriate to a specific application.