

Product Data Sheet



STARBOND UL 81-10

High Quality, One Component, UL Certified, Non-Flammable Synthetic Rubber Based, Adhesive

Uses:

- Bonding of Fibrous Insulation Materials to Metal Air Handling Ducts
- Internal or External Application

Product Description

STARBOND UL 81-10 is a single component, commercially attractive, quick setting, synthetic elastomer adhesive designed for the interior or exterior adhesion of fibrous insulation material to metal ducts as wrapping and acoustical linings.

Advantages

- Economical
- Excellent cohesive & bonding strength
- Water resistance
- Chemical resistance
- Good wet tack
- Suitable for Middle East climate conditions

Standard Compliance

- ASTM C916 Type IV (ASC-A-7001-A, Type IV)

Technical Properties

STARBOND UL 81-10	Typical Values & Laboratory Conditions
Color	Green, transparent Yellow and Amber Red
Viscosity, Cps @25°C, S 3, rpm 20	3000- 4500
Solid Content, % @110°C, 2 hrs	28 – 35
Density, kg/L	0.85 – 0.93
Coverage, m2/kg	4.9 – 9.8
Wet Film Thickness, mm per coat	0.2 – 0.1
Flash Point, °C	< 10
Service Temp, °C	-20 to +90
Open Time, min	10 - 20
Solubility	Aromatic Solvent
Cleaning	Clean all tools immediately with aromatic solvent
Non-Volatile Content	17 – 19% by volume (27 – 30% by weight)
Bond Time	0 to 15 minutes
Wet Flammability	Flash point: -7°F (-22°C)

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Application

SURFACE PREPARATION

The surface should be clean, dry, sound and free from oil, grease and wax contamination.

PRIMING

Priming is normally not required on metal substrates.

APPLICATION

STARBOND UL 81-10 can be applied by Brush and Spray Equipment.

For fibrous wool & GI sheet, apply adhesive evenly with any suitable equipment and wait for 5 to 10 minutes before bonding the fibrous material.

For other substrates, after applying the adhesive wait until solvent is fully evaporated and assemble the surface by applying normal hand pressure.

Brush:

Use a clean paintbrush. Uniformly, apply to metal surface at 4.9 – 9.8 m²/l. Press insulation into place, making sure complete contact is made with applied adhesive. Bond may be made after observing the evaporation time within 0 to 15 minutes.

Spray:

Spray application with conventional air atomizing equipment or airless spray equipment. For spray equipment information, please consult spray recommendations or contact your spray equipment supplier. Average viscosity range: 200 – 500 cps.

Health & Safety:

As with all chemicals, caution should always be exercised. Protective clothing such as gloves and goggles should be worn.

INHALATION: Inhalation of vapor or mist should be avoided. If inhaled symptoms include coughing, wheezing, laryngitis, and shortness of breath, headache, nausea, and vomiting. Immediately shift victim to fresh air, and, if needed immediately start artificial respiration. Give oxygen if breathing is labored. Get emergency medical help.

EYE CONTACT: Flush eyes with water for 15 minutes and call for medical help.

INGESTION: Causes nausea, vomiting, and loss of consciousness. If accidentally swallowed do not induce vomiting rather call for medical help immediately.

SKIN CONTACT: Flush with water or soap and water until all traces have

Curing:

STARBOND UL 81-10 is set to tough within 1h after application and Dried Through within 24h.

Cleaning:

Remove STARBOND UL 81-10 product from tools, equipment, and mixers with STAR Solvent before the initial set. Cured material can only be removed mechanically.

Packing & Coverage:

Product	Pack Size	Theoretical Coverage
STARBOND UL 81-10	15 ltr pail	Subject to type of surface and nature of material being bonded 4.9 – 9.8 m ² /l at wet film thickness of 0.2 – 0.1 mm

Stated consumption data are for general guidance. Actual consumption depends on the nature of substrate, method of application, and wastage.

Shelf Life & Storage:

The original sealed container of STARBOND UL 81-10 has a shelf life of 12 months, provided it is stored clear of ground in a dry, shaded place below 35°C.

Limitations:

- Always test plastic materials for compatibility when using solvent-based products.
- Make certain this product is completely dry and the area free from solvent odor if food is involved.
- Not suggested for sealing vapor barrier jackets
- Overhead applications may require mechanical fasteners

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Additional Information:

STAR manufactures a wide range of construction chemicals and specialty products for various applications divided into the following product sections:

1. **Waterproofing Products**
2. **Sealants, Grouts, and Joint Fillers**
3. **Adhesives**
4. **HVAC – Adhesives, Coatings & Sealants**
5. **Flooring Products**
6. **Industrial Adhesives (i.e. Paper Industry)**
7. **Accessories**

STAR Technology provides various technical information such as detailed method statements, specification clauses, application manuals and technical support both in contractors and consultant's offices as well as construction sites.

For further information on these products and systems kindly visit our website or contact your local STAR representative