

Product Data Sheet



STARACRYSEAL DS UL 32-17

One Component, High Performance, Fire Resistive, Aqua based, Vapor and Air barrier Sealant

Uses:

- HVAC – Duct Systems
- Adhesive to Metal, Aluminum, Ceramic, Concrete and Mild Steel

Product Description

STARACRYSEAL DS UL 32-17 is an aqua based, vapor barrier sealant for low, medium and high pressure or high velocity – metal, fiberglass and flexible heating and air conditioning air ducts, forming a durable seal against air leakage.

Advantages

- Possesses permanent elasticity .
- Non-Flammable
- Excellent adhesion & High strength
- Highly resistance to extreme temperature changes and aging.
- Suitable to Middle East climatic condition
- Highly resistance to mold & mildew
- Resistance to oil or grease
- Mildly resistance to diluted alkalis and acids
- Paintable

Standard Compliance

- ASTM C-411 – Hot Surface Performance of High Temperature Thermal Insulation
- ASTM C-732 – Aging Effects oof Artificial Weathering on Latex Sealants)
- ASTM D-2022 – Slump Test

Technical Properties

STARACRYSEAL DS UL 32-17	Typical Values & Laboratory Conditions
Base	Synthetic Resin
Color / Appearance	White / Grey
Density, Kg/ltr	1.65 – 1.75 Kg/l
VOC Content (ASTM D2369)	55% by Volume
Viscosity Flow (ASTM C 639)	Non Sag
Service Temperature Limits	-7 C to 95 C
Drying Time @ 23C and 50% RH	Set to Tough: 1h Dry Through: 24 h
Shore Hardness	Type A: 80
Water Vapor Permeance	ASTM E96, PROCEDURE A: 0.45 perms (0.30 metric perms) at 35 mils (0.9 mm) dry thickness.
Wet Flammability	No flash to boiling, over 99C
Surface Burning Characteristics	Flame Spread: 5 Smoke Developed: 0

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Application

SURFACE PREPARATION

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

PRIMING

Priming is normally not required on good quality substrates.

APPLICATION

STARACRYSEAL DS UL 32-17 should be applied on clean, dry, oil-free and sound (To clean surface use power blower) surfaces.

STARACRYSEAL DS UL 32-17 should not be thinned.

Apply by power extrusion or trowel uniformly a 2" wide coat over the joint @ 2 to 2.2 gal/100 ft². Total coverage 40-55 ft²/gal.

Allow the completed joint to dry at least 24 hours above 25°C before pressure testing.

High humidity (70%) and or cooler temp. may retard drying. Total WFT to be 30-35 mils.

Curing

STARACRYSEAL DS UL 32-17 typically cures within 24 to 48 hours at room temperature and average humidity conditions. However, curing time can vary based on temperature, humidity, and the sealant's depth in the joint.

STARACRYSEAL DS UL 32-17 may be pressure tested within 16 hours dry time above 21°C and below 60% RH. It quickly forms a strong bond to galvanized steel, aluminum or mild steel metal ducts.

Limitations

To resist rain wash off, allow at least 12-15 hours drying time above 4°C, with a relative humidity of 50%. Higher humidity or lower temperatures may retard drying.

Always test foil and paper facings for acceptable adhesion.

Outdoor horizontal surfaces must always drain completely. A pitch of at least 4 cm/m is required.

If used between impermeable surfaces, drying time will be extended.

Cleaning:

Remove STARACRYSEAL DS UL 32-17 from product from tools and equipment with STAR Solvent before the initial set. Cured material can only be removed mechanically.

Packing & Coverage:

STARACRYSEAL DS UL 32-17 is packed in 20 Kg pails.

For Joint applications:

Joint Size in mm	Yield in m per 600 ml
6 x 6	14 – 16
9 x 6	9 – 10
12 x 6	6 – 7
15 x 10	3 – 3.5
25 x 12	1.5

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 Pail of STARACRYSEAL DS UL 32-17 as a shelf life of 12 months, provided it is stored clear of ground in a dry, shaded place below 35°C.

Health & Safety:

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

STARACRYSEAL DS UL 32-17 is not considered hazardous – But contains Isocyanate.

For detailed information and advice on the safe handling, storage, and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological, and other safety-related data.

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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