Scotch-Weld[™] 5313 Preformed Sealant Strip

Product Data Sheet

Updated : July 2006 Supersedes: March 1996

Product Description

5313 is a tacky solid extrusion based on a synthetic rubber. The adhesive strength of 5313 is sufficient to cause cohesive failure of the sealer before loss of adhesion to the substrate, when pulled in tension.

The sealer is a non-curing type and retains the same properties and consistency after ageing in several different environments, including weathering.

Physical Properties Not for specification purposes

| Solvent | None | | |
|------------------|--|--|--|
| | | | |
| Flash Point | None | | |
| | | | |
| Consistency | Solid Rubber Extrusion | | |
| | | | |
| Solids Content | 99% by wt. | | |
| | | | |
| Specific Gravity | 1.3 (approx) | | |
| Specific Grains | | | |
| Colour | Black | | |
| | 2.55. | | |
| | | | |
| Shelf Life | 12 months from date of despatch by 3M when stored in the | | |
| | original carton at 21°C (70°F) & 50 % Relative Humidity | | |

Performance Characteristics

Not for specification purposes

| Service Temperature | -29°C to 100°C (-21°F to 212°F) | | | |
|-----------------------|--|-----------------------------|--|--|
| Range | | | | |
| | | | | |
| Water Resistance | Excellent | | | |
| | | | | |
| Weathering Resistance | Excellent | | | |
| | | | | |
| Fuel & Oil Resistance | Poor | | | |
| | | | | |
| Compatibility Data | Supported PVC | No migration staining. | | |
| - | Paint (automotive enamel) | } No staining, pinholing or | | |
| | (automotive lacquer) | } softening. | | |
| Compression Data | Two beads, 9mm diameter x 75mm long compressed to 0.2" | | | |
| | at 50mm/minute. | | | |
| | Force to compress - 35 lb | | | |
| | 5 minute rebound height - 0.220" | | | |

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Environmental Characteristics

| Ozone Resistance | No Change |
|--|---|
| Low Temperature Flexibility (-29°C) | No Cracking |
| Heat Resistance (45 minutes at 135°C) | No plasticiser migration, flow, blistering, nor loss of adhesion. |

| Test Method | Performance | | | |
|-----------------------------------|---|-------------------------------------|----------------------------|--|
| Ageing Cycle | Tensile Strength# (PSI, 100% cohesion failure) | Durometer# Hardness (Shore A) | Fatigue Resistance * | |
| | | | | |
| 24 hours at 22°C | 7 | 5 | N/A | |
| 336 hours at 88°C | 12 | 20 | No Failure | |
| 500 hours at 38°C & 95-100% RH | 9 | 15 | N/A | |
| 500 hours at 63°C & UV Light | N/A | 18 | N/A | |
| 336 hours at 38°C & 95-100% RH | N/A | N/A | No Failure | |
| 336 hours at 22°C Water Immersion | N/A | N/A | No Failure | |

[#] Test performed at 23°C.

("No failure" indicates 100,000 cycles tested without failure).

Directions for Use

Surface Preparation:

In order to obtain optimum efficiency, the surfaces which are to be sealed must be dry, clean and free from grease and oil.

Application:

5313 is best applied by placing it directly on the surface to be sealed as it is removed from the roll and leaving protective liner in place until ready for final assembly, this minimises distortion and dirt pick-up.

Coverage:

Not Applicable

Drying Time:

Not Applicable

Clean Up:

Excess sealer may be removed by cutting with a sharp knife or scissors moistened with water.

Storage Conditions

Store below 22°C for maximum storage life.

^{*} Bonds deflected 60 mils horizontally at 665 cycles per minute at -29°C after indicated ageing cycle.

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Additional Product Information

Test Results:

5313 has been tested by the 3M Laboratory, some of the specific tests and results are listed above. Prospective customers however, should evaluate the product to suit specific needs and end users.

Health and Safety Information

Precautions:

May cause eye irritation. Avoid eye and prolonged skin contact.

First Aid:

Eye Contact:

Immediately flush eyes with plenty of water and call a physician.

Skin Contact:

Wash affected area with soap and water.

For further Health and Safety information, please contact the Toxicology Department at

Bracknell Head Office on (0344) 858000.

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Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations.



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