

SpectraSeal

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Technical Data Sheet

Description

SpectraSeal MC is a microcellular elastomeric polyurea. This system uses a high pressure, plural component machine.

Preliminary Component Properties

| | Units | SpectraSeal MC Resin | SpectraSeal MC Isocyanate | Test Method |
|------------------|-------------------|----------------------|---------------------------|-------------|
| Appearance | | Liquid | Pale Yellow Liquid | Visual |
| Density (23°C) | g/cm ³ | 1.01 | 1.12 | ASTM D1475 |
| Viscosity (23°C) | cP | 600-900 | 500-1000 | ASTM D4287 |
| Flash Point | °C | >100 | >150 | Closed Cup |

These are typical values and should not be construed as specifications.

Recommended Process Conditions

The resin component must be mixed until homogenous before use. The material is processed with a two component high pressure dosing machine using impingement mixing technology, a feed rate of 0.5 to 2 gallons/minute, and a round nozzle.

| | Unit | Value |
|--|------|-------------|
| SpectraSeal MC | Vol. | 1.00 |
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| Typical Component Temperature (both components, tanks and hose the same) | °F | 140-160 |
| Typical component Pressures | psi | 1,500-2,000 |

Typical Reaction Characteristics*

| | | |
|----------------|-------|--------|
| Gel Time | 8 sec | 7 sec |
| Tack-free time | 8 sec | 16 sec |

*- Values refer to test made with two-component, high pressure machine run according to the recommended process conditions above; Typical values and should not be construed as specifications.



Handling and Storage

| | Units | SpectraShield MC Resin | SpectraShield MC Isocyanate |
|----------------------------------|--------|------------------------|-----------------------------|
| Storage Temperature | ° F | 70-75 | 15-25 |
| Storage Stability/Shelf Life (1) | months | 6 | 6 |

1. Both resin and isocyanate components must be protected against humidity and stored in sealed containers.

Typical Polymer Properties

| | Unit | Value | Test Method |
|----------------------------|--------------------|-------|---------------|
| Hardness | Shore A | 40 45 | ASTM D2240 |
| Tensile strength | Psi | 223 | ASTM D412 |
| 100% modulus | Psi | 145 | |
| Elongation at break | % | 185 | ASTM D412 |
| Tear resistance | pli | 119 | ASTM D624C |
| Insulation Value, k-factor | Wm ² ·K | 0.36 | ASTM C 518-04 |
| Density | lb/ft ³ | 27 | DIN 53479 |

These are typical values and should not be construed as specifications.



Precautions

The use of this two-component system required special precautions. Please refer to the Safety Data Sheet (SDS) before using. Avoid inhalation of the vapor and contact with skin and eyes. Working areas should be well ventilated with fresh air.

Use protective gloves and goggles. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of contact with skin, wash immediately with plenty of water and soap. During spray application, wear suitable respiratory equipment.

Product Stewardship

CCI Spectrum, LLC has a fundamental concern for all who make, distribute and use its products, for the environment in which we live. This concern is the basis for our Product Stewardship philosophy by which we assess the safety, health and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our Product Stewardship program rests with each and every individual with SpectraSeal MC products – from the initial concept and research, to manufacture, use, sale, disposal and recycle of each product.

Safety Considerations

Safety Data Sheets (SDS's) are available from CCI Spectrum, LLC. SDS's are provided to help customers satisfy their own handling, safety and disposal needs and those that may be required by locally applicable health and safety regulations. SDS's are updated regularly, therefore, please request and review the most current SDS before handling or using any product. These are available from the nearest CCI Spectrum, LLC office.

Customer Notice

CCI Spectrum, LLC encourages its customers to review their application of our products from the standpoint of human health and environmental quality. To help ensure that the products are not used in ways for which they were not intended or tested, SpectraSeal MC personnel will assist customers in dealing with ecological and products safety. Your sales representative can arrange the proper contacts.