

Addisil™ 1x0 E Series

Heat Curable Rubber

Description

The Addisil 1x0 E series is a one-component heat curable rubber to consider for making elastomers (HCE) with a hardness range between 40 and 70 Shore A for medical applications. This series is based on a platinum cure system, which makes it an excellent candidate for high value extrusion applications where regulatory compliance, transparency, mechanical performance and/or productivity are important such as the manufacture of extruded transparent tubing and profiles for use in healthcare applications.

Key Features and Typical Benefits

- High transparency, no yellowing
- Excellent mechanical properties
- Dry, non-stick surface
- Odourless during processing and in final application
- Fast curing
- One-component, ready to use
- Shelf life of 3 months from date of manufacturing when stored properly

Typical Physical Properties

| | | | | |
|--|-----------------------------|--------------|--------------|--------------|
| <u>Typical Physical Properties of the Vulcanized Rubber:</u> Test results on moulded slabs, Vulcanized conditions: 10 min. @ 175 °C Post cure: 4h @ 200 °C in hot air | Addisil 1x0 E Series | | | |
| | 140 E | 150 E | 160 E | 170 E |

| | | | | | | |
|---------------------|---------------------|-------------------|------|------|------|------|
| Density | BS ISO 2781: 2010 | g/cm ³ | 1.15 | 1.16 | 1.18 | 1.20 |
| Hardness | BS ISO 7619-1: 2010 | Shore A | 45 | 52 | 61 | 71 |
| Tensile strength | BS ISO 37: 2011 | MPa | 10 | 10 | 10.5 | 9.5 |
| Elongation at break | BS ISO 37: 2011 | % | 700 | 650 | 530 | 470 |
| Tear Strength | ASTM D624 B | kN/m | 35 | 36 | 32 | 32 |

Typical physical properties are average data and are not to be used as or to develop specifications.

Regulatory Compliances

| | Addisil 1x0 E Series | | | |
|--------------------------|----------------------|-------|-------|-------|
| | 140 E | 150 E | 160 E | 170 E |
| BfR | Yes | Yes | Yes | Yes |
| FDA | Yes | Yes | Yes | Yes |
| USP Class VI | 1) | 1) | Yes | 1) |
| DIN ISO 10993 | Yes | 1) | Yes | Yes |
| EUR. Pharmacopoeia 3.1.9 | Yes | Yes | Yes | Yes |

1) While this grade has not been fully tested against the standard, it has similar formulation and chemical composition as the grades that have passed the applicable testing.

The ingredients used to formulate these products are compositionally compliant with 21 CFR 177.2600, rubber articles intended for repeated use and the BfR recommendation XV “Silicone”. It is the responsibility of the user to determine that the finished product complies with the provisions of 21 CFR 177.2600 and BfR recommendation XV under their specific manufacturing procedures. See 21 CFR 177.2600 and BfR recommendation for details of extractive limitations and other requirements.

General Considerations for Use

Cure inhibition: Being a platinum cure mechanism, the following contaminants can cause cure inhibition:

- Amine derivatives: organic and inorganic basic compounds
- Sulphur products: anti-oxidants from plastics (thio compounds and sulphides)
- Metal soaps: mould release agents or anti-acids as Zn or Ca stearate from Polyolefins
- Tin compounds
- Phosphorous products: anti-oxidants from plastics (phosphines and phosphates)

Packaging

The **Addisil 1x0 E** series is currently available in 25 kg, 250 kg, 500 kg cardboard boxes.

Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

Product Safety, Handling and Storage

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at www.momentive.com or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

Limitations

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

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For literature and technical assistance, visit our website at: www.momentive.com

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