ContiTech

Elastomer Coatings

Market segment
Engineered Coated Systems

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Would you like to obtain further information about Conti® Thermo-Protect? Just scan this QR code.

ContiTech. Engineering Next Level

As a division of the Continental Group, ContiTech is a recognized innovation and technology leader in natural rubber and plastics. As an engaging partner with a firm future ahead of us, we engineer solutions both with and for our customers around the world. Our bespoke solutions are specially tailored to meet the needs of the market. With extensive expertise in materials and processes, we are able to develop cutting-edge technologies that enable us to make responsible use of resources. We are quick to respond to important technological trends, such as function integration, lightweight engineering and the reduction of complexity, and offer a range of relevant products and services. That way, when you need us, you’ll find we’re already there.

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Conti® Thermo-Protect.
Flexible Insulation for Industry.

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With the innovative insulation system from ContiTech, thermal insulation is less complicated and more efficient – particularly in the case of complex line systems.

Conti® Thermo-Protect is a new, ultra-flexible insulation system, developed by experts at the ContiTech Elastomer Coatings business unit. It is particularly easy to process, and a ideal for the thermal insulation and protection of flexible and complex line systems, piping systems, and components that are resistant to dynamic loads. Conti® Thermo-Protect provides reliable insulation, especially in setups involving high temperatures.

The product consists of a special silicone rubber compound. It is supplied unvulcanized and can be molded into required shapes, similar to plasticine. Under the influence of heat, the compound cure automatically within a few hours – taking a maximum of around five weeks at room temperature – and becomes a reusable molded element with rubber-elastic properties.

Conti® Thermo-Protect is the ideal insulation solution for highly complicated or flexible line or piping systems. This product from ContiTech is used in areas in which conventional insulation materials are no longer sufficient. The reusable compound can be easily attached to fittings and valves that were previously very difficult or even impossible to insulate – and this in the high-temperature range up to 250°C as well. Conti® Thermo-Protect provides a reliable shield against heat and saves significant energy costs – for example in heating or thermal oil installations and vulcanization presses.

**Conti® Thermo-Protect – The Benefits**

- **High-temperature range:** the insulation system can be used in the high-temperature range up to 250°C
- **Flexibility:** Conti® Thermo-Protect remains dynamic, flexible, and robust at temperatures from -50°C to 250°C
- **Excellent thermal insulation:** significant reduction in heat dissipation by up to 80%
- **Increased safety in the workplace:** insulation with Conti® Thermo-Protect reduces the risk of burns and impact injuries, and it also lowers the temperature in the workplace
- **Diverse properties:** the product is water-repellent and self-extinguishing, UV resistant, weatherproof, and resistant to a wide range of media
- **Easy handling:** Conti® Thermo-Protect is highly flexible and ductile, self-adhesive, very easy to process, and just as easy to remove
- **Sustainable:** Conti® Thermo-Protect is an ecologically smart innovation that has a long lifespan and can be reused after use, the material can be disposed of as easy to remove
- **Eco-friendly:** after use, the material can be disposed of
- **Independently inspected:** Conti® Thermo-Protect has been tested by the Forschungsinstitut für Wärme- schutz e. V. in Munich, a German research institute for heat protection
- **Ease of processing:** extremely easy to process and extremely flexible: Conti® Thermo-Protect can be recouped after just six months
- **Corrosion protection on heat conductors:** minimizes the risk of corrosion under insulation
- **Flexibility:** Conti® Thermo-Protect remains dynamic, flexible, and robust at temperatures from -50°C to 250°C
- **High-temperature range:** the insulation system can be used in the high-temperature range up to 250°C as well. Conti® Thermo-Protect provides a reliable shield against heat and saves significant energy costs – for example in heating or thermal oil installations and vulcanization presses.

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**Approx. values for the reduction in heat dissipation with Conti® Thermo-Protect insulation**

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<thead>
<tr>
<th>Insulation thickness [mm]</th>
<th>Dissipation [%]</th>
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<tbody>
<tr>
<td>0</td>
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**In comparison to mineral wool at 200°C, according to ASTM E 110-01 (It takes 60 days depending on density and delivery form)**

**Conti® Thermo-Protect** is available in different forms – including molded elements, sheets, and hoses.

**Product range**

- **Sheets:** unvulcanized sheets are suitable for customized and flexible insulation of flanges, fittings, and complex line systems, as well as machines and other systems. Sheets that have been vulcanized and are therefore stable but still flexible are suitable for the heat insulation of stationary surfaces or as heat barriers.
- **Hoses:** vulcanized hose insulation elements are particularly flexible and robust. Pre-slit hoses are available in various thicknesses. Closed insulation elements are also available. Moulded elements can be pre-manufactured and vulcanized molded elements for quick insulation of valves and fittings. Various formats are available to cover the most frequently used standard sizes of fittings. We can also supply made-to-order items.
- **Paste:** the paste is supplied in cartridges for easy dispensing of the unvulcanized insulation material, making this the perfect solution for sealing slots and holes. An ideal add-on when using Conti® Thermo-Protect.
- **Accessories:** our range of accessories extends the potential applications for Conti® Thermo-Protect. For example, we offer matching closure systems for reliable closure of the molded elements. A silicone adhesive is also available.