Fabric Specification

ThermGuard™ Molten Repel

Description: Teflon® / Meta-Aramid
Weight: 600g/m²

<table>
<thead>
<tr>
<th>Test Method</th>
<th>Length</th>
<th>Width</th>
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<tbody>
<tr>
<td>Dimensional Stability, Strength &amp; Charge Decay</td>
<td></td>
<td></td>
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<tr>
<td>Washing 60°C ISO 6330: 2001 (5 cycles + 1 dry)</td>
<td>&gt;2.0 %</td>
<td>&gt;2.5%</td>
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<tr>
<td>Pilling 36,000 revs. ISO 12945: 2001 Gr4/5</td>
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<tr>
<td>Tear Strength ISO 13937-2: 2000</td>
<td>&gt;150 N</td>
<td>&gt;130 N</td>
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<tr>
<td>Tensile Strength ISO 13934-1: 1999</td>
<td>&gt;130 N</td>
<td>&gt;160 N</td>
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<tr>
<td>Abrasion (126 Pa) ISO 12947-2: 1999</td>
<td>2,000,000 revs.</td>
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<tr>
<td>Charge Decay EN 1499-3: 2004</td>
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</tbody>
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ISO 11612:2008 - Protective Clothing - Heat & Flame and Molten Metal Splash Properties

Heat Resistance
- ISO 9473: 2000 at 180°C PASS - maximum shrinkage 1%
- ISO 9473: 2000 at 250°C PASS - maximum shrinkage 6%

Flame Spread
- ISO 15025: 2000 Class A1 - Face Ignition
- ISO 15025: 2000 Class A2 - Edge Ignition

Convective Heat

Radiant Heat

Molten Metal Splash

Impact of Spatter
- ISO 9150: 1998 No ignition ±10 drops

- Class 2


Arc rating
- ‘Box’ method: EN 61482-1-2: 2007 Class 2

Disclaimer
ThermGuard™ Molten Repel is not intended to replace primary protective clothing in purely hazardous situations such as aluminized garments worn very close to the furnace. It is the user’s responsibility to determine the risk level and use of appropriate personal protective equipment.

Waste Disposal
- Product is non-hazardous and can be landfilled in compliance with local regulations.
- Incineration is not recommended due to the inherent thermal resistance of the product and its components.
- If more information is required, contact TTEL sales representative.

Care recommendations
- Wash, dry and store in the same manner as conventional clothing.
- Do not crease or crease heavily.
- Do not bleach.
- Do not use vats of water.
- Do not dry-clean.
- Do not iron together with heat source.
- Do not tumble dry.
- Do not use softeners.
- Do not bleach.

ThermGuard™ Molten Repel is available through Toray Textiles Europe Ltd.

TORAY TEXTILES EUROPE LIMITED

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A revolution in molten metal splash protection

• ISO 11612: 2008. Clothing to protect against heat & flame and molten metal splashes
• ISO 11611: 2007. Protective clothing for use in welding and allied processes
• Enhanced molten metal splash protection
• Enhanced Cryolite splash protection
• EN 61482-1-2: 2007. Electric arc protection
• Stable to industrial washing

Toray Textiles Europe Ltd
New Technology

ThermGuard™ Molten Repel is a unique revolutionary material offering enhanced protection against large and small molten metal splashes. This new innovative technology provides excellent shedding of molten iron, aluminium, cryolite, copper, magnesium and other molten metals.

The hazard of molten metal splashes is present in the foundry and also during welding, cutting and grinding. Molten metal splashes can stick to the surface of a protective garment and conduct heat through the fabric which can lead to serious burn injuries and/or ignition of the garment. A worker’s protective clothing should repel or “shed” the heat source totally.

ThermGuard™ Molten Repel provides exceptional levels of “shedding” even when they occur repeatedly in the same area. This new innovation composing Teflon® and meta-aramid achieves uncompromised protection from the “non-stickability” of Teflon® and thermal protection and comfort of meta-aramid. ThermGuard™ Molten Repel is intended to be used in areas where there is continuous exposure to splashes and sparks.

Advantages of ThermGuard™ Molten Repel

- Fully meets the performance requirements of: ISO 11612: 2008 - (D3 & E3) and ISO 11611: 2007 - Class 2.
- Excellent protection against Cryolite the catalyst used to extract aluminium from ore. This metal-like material is hotter and stickier than aluminium and therefore presents a greater risk.
- Excellent repellency, much less prone to damage, longer life.
- Stable industrial washing, achieves D3 and E3 after 50 times washing
- Supple and comfortable to reduce the risk of heat stress caused by heavy work in hot environments.
- Chemical splash protection, resistant to acid and alkali liquid penetration to method EN ISO 6530: 2005
- Protects against intensive heat and molten metal splashes of an electric arc, meets the requirements of EN 61482-1-2: 2007 - Class 2
- Protects against static electric discharge hazards

International patent filed