

## Introduction

At the heart of our SoliWool™ product line is SoliBulk™: an extensive range of high-temperature bulk fibers available in both Refractory Ceramic Fiber (RCF) and Low Bio Persistence (LBP) fiber variations. These fibers are ideal raw materials for secondary processing, such as the production of VF shapes or filling air gaps.

Our Ultra Low Shot fiber technology is enabling a higher fiber index and lower shot contents. In result, you will benefit from a higher yield in the further processing of the fiber, or enhance properties of your final product.

### SoliBulk™ X-grade

SoliBulk X-grade is our standard RCF bulk fiber with a classification temperature of 1260°C. Thanks to the Ultra Low Shot technology this product is offering superior strength in secondary processing (Vacuum Forming).

### SoliBulk™ ZR-grade

The combination of a high level of zirconia, the use of our Generation III spinning technology, and production excellence make our 1430°C rated SoliBulk ZR-grade the smart solution for applications operating up till 1300°C continuously.

### SoliBulk™ ULS®-grade

SoliBulk ULS-grade offers a variety of bulk fiber types derived from our advanced Generation III low bio persistence fiber providing exceptional performance and thermal insulation. SoliBulk ULS-grade is known for its low linear shrinkage almost all the way up to the classification temperature of 1260°C.

All products in the SoliWool ULS fibers product range, like the SoliBulk ULS, meet the requirements specified under NOTE Q of European Regulation 1272/2008. SoliBulk ULS fiber products are therefore exonerated from labelling requirements in Europe.

We offer our bulk fibers in lubricated (long and long plus) and unlubricated (chopped, short and medium) in line with the application requirements:

- **Chopped** - high density VF shapes and mastics
- **Short** - standard VF manufacturing
- **Medium** - infill for double walled chimneys
- **Long** - void/joint fillers, dry injected fibers and textiles

## Type

Loose insulation wool from high temperature refractory ceramic fiber (RCF) or low bio persistence (LBP) fiber

## Temperature range

SoliBulk™ X-grade has a classification temperature of 1260°C.

SoliBulk™ ZR-grade has a classification temperature of 1430°C.

SoliBulk™ ULS®-grade has a classification temperature of 1260°C.

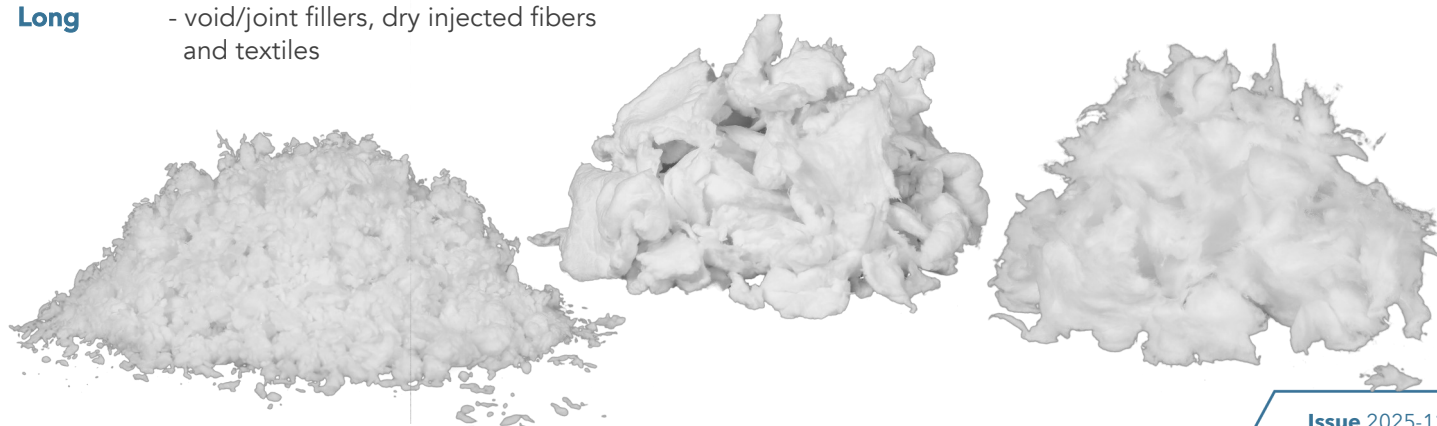
The maximum continuous use temperature provided on the datasheet is a guideline and only applicable in a clean oxidizing atmosphere.

## Typical applications

- Raw material for Vacuum Forming process;
- Raw material for insulating castables, mastics and coatings;
- Filling and stuffing of voids and gaps in furnace lining;
- Injected/blown fiber in double wall chimneys;
- Long fibers for yarn production (textiles);
- General technical insulation of furnaces and technical installations.

## Benefits

- Proven technical solution
- Low shot technology
- Higher yield in secondary processing
- Excellent insulation performance
- High handling strength
- Excellent thermal stability
- Resistant to thermal shock
- Exonerated from carcinogenic classification (SoliBulk ULS-grade)



Properties measured	Standard	Unit	SoliBulk™ X-grade	SoliBulk™ ZR-grade	SoliBulk™ ULS®-grade
Grade			RCF	RCF	RCF
Colour			Off white	white	white
Classification temperature		°C	1260	1430	1260
Continuous use temperature		°C	1150	1300	1100
Beaker value (fiber length), ml					
Chopped			60-100	60-100	60-100
Short (VF)			140-200	140-200	140-200
Medium			250-400	250-400	250-400
Long			450-600	450-600	450-600
Mean Fiber Diameter		µm	2-3.5	2-3.5	2.5-4
Shot contents	Jetsieve	> 45 µm	< 42%	< 42%	< 35%
Chemical composition,	EN 12677	%			
SiO <sub>2</sub>			53-55	48-51	63-68
Al <sub>2</sub> O <sub>3</sub>			44-46	34-37	-
ZrO <sub>2</sub>			-	14-17	-
CaO			-	-	26-33
MgO			-	-	3-7
Other			< 1	< 0.5	< 1

## Contact

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This information is composed for marketing purposes and is accurate to the best knowledge of Vulcor Insulation BV. All values give are typical values, not guaranteed unless explicitly expressed.

As Vulcor Insulation BV and its selected 3<sup>rd</sup> party partners strive to continually improve our products as means of continuous development, properties may be subject to change without notice. Vulcor Insulation BV accepts no legal responsibility for use or reliance upon this data. For information regarding specific applications of the product please contact Vulcor Insulation BV.

The product label 'Soli', the company name 'Vulcor' and the 'ULS' technology are registered.

## Yield

In Vacuum Forming production the shot typically sinks in the liquid mixture, resulting in less volume per kg of bulk fiber. With the Ultra Low Shot technology we typically improve the yield by 15-30 % over Generation I and Generation II products.

## Availability

SoliBulk is packed on our new state of the art production line which is targeted to minimize deviation of the fiber length throughout the packaging. SoliBulk is standard supplied with 30 plastic bags on pallets to maximize the quantity per container.

Contact our sales department for packing details of our SoliBulk products.

## Specification

We offer our SoliBulk as standard product, and as engineered bulk. As engineered bulk we tailor our SoliBulk products with processing like deshotting and milling.

SoliBulk is offered in various types and styles. It is crucial to match the fiber to the application. For that reason, please always consult with our experts.

## Product range

SoliBulk is part of an extensive product range supplied by Vulcor Insulation. Vulcor Insulation is supplying insulation solutions from cryogenic to high temperature applications. All products offered by Vulcor are manufactured in house or sourced from exclusive trusted 3<sup>rd</sup> party partners.

## Technical support

Vulcor Insulation provides specifiers and customers with guidance on all aspects of the materials selection for their application, the installation and compliance with relevant regulations and performance standards.

For additional information about product performance, or to identify the recommended product for your application, please contact the team at Vulcor Insulation.