



## Technical Specifications

### Benefil Hardfoam RG22

<b>Manufacturer</b>	Aquaresins Technologies B.V.
<b>Address</b>	Nijverheidsweg 17A, 6651 KS, Druten, The Netherlands
<b>Contact</b>	Tel: +31 (0) 487 - 593 778 <a href="mailto:info@aquaresintechnologies.com">info@aquaresintechnologies.com</a> <a href="http://www.aquaresintechnologies.com">www.aquaresintechnologies.com</a>

<b>Unique producttype</b>	Benefil Hardfoam Benefil 2200 / RG22, in-situ formed void filling foam
<b>Intended uses</b>	Void & Cavity filling
<b>Harmonised Standards</b>	NEN-EN-ISO 844:2001 ASTM E-84-76A Nace code: F43 NEN-EN-ISO 9001:2015 NEN-EN-ISO 14001:2015
<b>Notified bodies</b>	TNO Science and Industry TÜV Nederland Quality Masters
<b>Revision date</b>	09-02-2022

## Components


	Component A - Resin	Component B - Hardener
<b>Trade name</b>	Benefil Resin	Benefil Hardener
<b>Voluminous mass @ 20 °C</b>	1160 kg/m <sup>3</sup>	1020 kg/m <sup>3</sup>
<b>Viscosity @ 20 °C</b>	±55 mPa•s	±50 mPa•s
<b>PH value</b>	7,0 - 7,5	1,8 - 2,3

## Product specifications

	Requirement
<b>Apparent Voluminous mass</b>	≥ 22 kg/m <sup>3</sup>
<b>Durability</b>	The polymer remains stable in dry conditions for at least 150 years after production, subject to proper storage and handling.
<b>Shrinkage</b>	At soil temperatures around 8°C <1,8%
<b>Compressive strength</b>	ISO 844 Method .070 kN/mm <sup>2</sup> >7000 kg/m <sup>2</sup>
<b>Temperature resistance</b>	Melting point: 120°C Flammability: Non flammable <25 by ASTM E-84-76A The polymer is non flammable, does not ignite nor burn.
<b>Behaviour during heating</b>	When heating to 70°C the cell structure of the dry foam may not visually change.
<b>Chemical resistance</b>	Resistant against organic solubles, mineral oils and hydrocarbons
<b>Cell structure</b>	73% Open cell structure



## Health & Safety

Toxicological Information	
<b>Carcinogenicity</b>	The hardfoam is non carcinogenic / non mutagenic
<b>Eyes</b>	None irritating when dry
<b>Skin</b>	None irritating when dry
<b>Inhalation</b>	None irritating when dry
Ecological Information	
<b>Environmental effects</b>	None (Biodegradable)
<b>Eco Toxicity</b>	None
<b>Bio concentration</b>	None
Hazards Information	
<b>H</b>	None
<b>P</b>	271 : Use only outdoors or in a well-ventilated area
	
Accidental Release Measures	
<b>Personal Precautions</b>	Keep away from non involved people
<b>Environmental Precautions</b>	No particular precautions needed The hardfoam is water-based and biodegradable
<b>Methods for Cleaning</b>	Brush up / dig up etc.
Handling & Storage	
<b>Handling</b>	Operators must be trained to work with foams. Operators must avoid breathing fine particles of product (dust).
<b>Storage</b>	Keep storage container/area ventilated. Protect from direct sunlight. Store in ventilated area.



## Physical & Chemical Properties

<b>Appearance</b>	White solid foam
<b>Odour</b>	Odourless when dry
<b>pH</b>	2,4-3,8 when applied 6,1-7,5 when matured
<b>Melting Point</b>	120°C
<b>Flash Ignition</b>	235°C
<b>Self ignition</b>	620°C
<b>Flammability</b>	Non flammable (<25 by ASTM E-84-76A)
<b>Explosive properties</b>	None
<b>Oxidizing properties</b>	None
<b>Vapour Pressure</b>	non applicable / non volatile acid
<b>Vapour Density</b>	non applicable / non volatile acid
<b>Density</b>	10-70 kg/m <sup>3</sup>
<b>Solubility in water</b>	Non soluble
<b>Dynamic Viscosity</b>	Solid

## Transport information

<b>Identification Number</b>	39211900
<b>Transport Name</b>	UF or aminoplast foam or Benefil Hardfoam
<b>ADR/RID</b>	Not applicable
<b>IMO-IMDG code</b>	Not applicable
<b>ICAO/IATA</b>	Not applicable





---

## BENEFIL HARDFOAM

The performance of the product identified above, is in conformity with the set of declared performances.

This declaration of performance is issued under the sole responsibility of the manufacturer above.

This Tech Spec Sheet in PDF format is available on request via:

- *Aquaresins Technologies B.V.*
- *Resins Industry B.V.*
- *Benefil Nederland B.V.*



**Aquaresins Technologies B.V.**  
Nijverheidsweg 17, 6651 KS, Druten - The Netherlands  
+ 31 (0) 487-593 778 - [info@aquaresintechnologies.com](mailto:info@aquaresintechnologies.com)

---