



# Nature Works

Hi-Tech Glass Filter Media for filtration

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## TECHNICAL DATA SHEET PRODUCT

### Stage 1

The whole range of filter medium based on glass by **Nature Works Hi-Tech Filter Media**, incorporates the **MC2 High Calibration Technology**. This allows to:

- Avoid compactation of the filter medium.
- Design the performance of the filter medium.
- Use just one kind of grane -one granulometric curve- for any size filter.
- The obtaining of a multifaceted particle, with no pores or sharp edges and harmless.
- Keep all the micro-channels of the filtering mass open, avoiding clogging inside the filter and maximizing the content of dirt capacity .
- Reduce the consumption of chemical products used for water maintenance.

The granulometric curve for Stage 1 has been designed in order to:

- Optimize the filter´s maximum content of dirt capacity, minimizing backwashing needs.
- Make the backwashing process outstandingly effective.
- Minimize the pressure loss into the filter, leading to lower consumption of the pump.
- Optimize the filtration quality, taking into account all the premises mentioned above.

<b>DESCRIPTION:</b>	Technical glass high-calibrated for industrial water treatment.	
<b>COMPOSITION:</b>	SiO <sub>2</sub>	74 %
	Na <sub>2</sub> O	11 %
	CaO	10 %
	MgO	3 %
	Al <sub>2</sub> O <sub>3</sub>	1 %
<b>Bureau Veritas integral production certification.</b>		
<b>Bureau Veritas integral product certification: absence of contaminants, purity and anti-compactation.</b>		
<b>TYPICAL PROPERTIES:</b>	Combustion loss at 1000 °C	no more than 0,1 %
	Resilience test, flooded base (1000 hours)	no more than 0,1 %
<b>COLOUR:</b>	Transparent. (Made exclusively from flat glass)	
<b>GRANULOMETRY:</b>	High-calibrated granulometry minimum 0,6 mm. 0,8 mm. on average.	
<b>DENSITY:</b>	Density of the particle	2490 kg/m <sup>3</sup> .
	Bulk density	1335 kg/m <sup>3</sup> .
<b>FORMAT:</b>	20 kg. recyclable paper bag in 3 layers with a UV-resistant layer of polyurethane. Or 1200 kg. Bulk Bag.	
<b>PRECAUTIONS:</b>	<b>Check the state of the collector or preferably substitute them.</b> Do not ingest.	
<b>INCOMPATIBILITIES:</b>	None detected.	
<b>INSTALLATION:</b>	Substitute the filtering mass for Nature Works Hi-Tech Filter Media and proceed to a 5 minute backwash before start to filtering.	
<b>RECOMENDACIONES:</b>	<b>In order to substitute the silica sand, incorporate 20% less weight in glass.</b>	
	Maximum admissible flow rate	90 m <sup>3</sup> /h/m <sup>2</sup>
	Typical working flow rate	between 15 and 50 m <sup>3</sup> /h/m <sup>2</sup>
	Critical point for backwashing	18 m <sup>3</sup> /h/m <sup>2</sup>
	Optimum flow for backwashing	30 m <sup>3</sup> /h/m <sup>2</sup> (higher flows do not clean any quicker)
	Optimum air flow injection	40 m <sup>3</sup> /h/m <sup>2</sup>