
Technical Datasheet ColorQuartz GRM

Highly decorative, functional, abrasion resistant Silica Quartz sand granulate. ColorQuartz GRM is coloured with UV stable polyurethane. It is suitable for functional and decorative purposes like industrial floorings and wall finishings.

Product description:

ColorQuartz GRM is a dry, coloured silica quartz sand granulate for use with polymers. It is coloured in an industrial process with an excellent high grade UV resistant Polyurethane binder, ready and easy to work with. You can scatter it on polymer binders like epoxy, PMMA or polyurethane resin systems. The product combines unique UV resistance colours with excellent technical, chemical and mechanical properties. It meets the highest demands which can be expected in case of reproduction.

General information and description

For the manufacturing of our products only the high grade organic and non-organic pigments are used. This combined with the most suitable binder for your application guarantees the highest quality and best functionality.

Product features / benefits:

- **Excellent abrasion resistance against heavy loads**
 - **Coloured with 100% UV resistant Polyurethane**
 - **Highly decorative appearance**
 - **For outdoor applications**
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Applications:

ColorQuartz GRM can be used as an anti-skidding layer. It can be scattered on a fresh polymer layer. The layer can be mechanically troweled and compressed by trowel after scattering what gives a smoother top surface, the so-called "compact" system. The ultra high quality standard of the final product depends on formulating of the total system, application procedures, the environment of usage and the application itself.

For example,

- *Industrial flooring in factory buildings, warehouses, hangars and workshops.*
 - *Highly decorative acrylic in- and outdoor wall finishes.*
 - *Suitable for use with Epoxy, PMMA, acrylic and Polyurethane binders.*
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Product data:

Name: -ColorQuartz GRM
EINECS-nr.: -238-878-4
Hs code: -25.05.10
CAS-nr.: -14808-60-7
Colours: - standard color collection with 20 traditional monocolours. .
 See colourcard for available colours
 Other colours are available on request.

Packing: -25 kg Polyethylen PE ventile bag on one-way pallet wrapped with stretch foil
 -1000 / 1250 kg one way big bags

Storage conditions: - Storage in the original sealed bags in dry place. Long-term exposure to sunlight will damage the packing

Pictures:**Technical data:**

CfQS, the two components polyurethane colouring system that is fully UV stable and has a good resistance against abrasive loads. It has better specifications than for example epoxy coloured sands. It is suitable for use in industrial floorings, acrylic wall finishings and decorative sands. Everywhere, where normally later a topcoat will be applied.

System CQE is available on special request for most of our products as a feature. It has an excellent abrasion resistance against mechanical loads.

UV stability of our polyurethane color coating when applied on the granulate is full.

UV stability is tested. Compared are our polymer system to reference products that are based on Polyurethane and Epoxy. Executed test was an 168 hour UV test with wave length 313 Nm. Special datasheet for these test results is available on request.


<i>Polyurethane systems CQE / CQS and CfQS</i>	
<i>UV non lighted $\Delta E=$</i>	<i>7,47</i>
<i>UV lighted $\Delta E=$</i>	<i>13,61</i>

UV stability of used pigments

The GRM colour collection is specially developed for outdoor applications. The pigments used have full UV stability and atmospheric conditions resistance. It can be also used in indoor applications.



Technical data:

Technical specifications:																					
Hardness (Mohs)	7																				
Chemical content of Granulation, this analysis is a average guideline. It is taken from the CfQS 0,5-1,0 mm sand, other granulations can have slightly different values.	<table> <tr><td>SiO²</td><td>: 96,88%</td></tr> <tr><td>AL²O³</td><td>: 1,928%</td></tr> <tr><td>Fe²O³</td><td>: 0,0975%</td></tr> <tr><td>TiO²</td><td>: 0,01242%</td></tr> <tr><td>CaO</td><td>: 0,0521%</td></tr> <tr><td>MgO</td><td>: <0,10%</td></tr> <tr><td>MnO</td><td>: 0,00254%</td></tr> <tr><td>K²O</td><td>: 0,892%</td></tr> <tr><td>Na²O</td><td>: <40%</td></tr> <tr><td>So³</td><td>: <0,020%</td></tr> </table>	SiO ²	: 96,88%	AL ² O ³	: 1,928%	Fe ² O ³	: 0,0975%	TiO ²	: 0,01242%	CaO	: 0,0521%	MgO	: <0,10%	MnO	: 0,00254%	K ² O	: 0,892%	Na ² O	: <40%	So ³	: <0,020%
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Moisture	< 0,1 %																				
Bulk density	1,55 kg/dm ³																				
Density	2,65 g/cm ³ (DIN ISO 787/10A)																				
Sieving Curve	<p>CfQS 0,4-0,9 mm CfQS G 0,8-1,2 mm CfQS 1,0-1,6 mm CfQS 1,0-2,2 mm CfQS 2,0-3,0 mm other granulations on request like CfQS 0,1-0,5 mm CfQS 0,5-1,0 mm CfQS 1,6-2,2 mm CfQS 2,0-4,0 mm CfQS 3,0-5,0 mm CfQS 4,0-6,0 mm CfQS 5,0-8,0 mm</p>																				
Maximum deviation of the sieving curve	15.00%																				
Polish Value (PSV) DIN EN 1097-8	PSV practical av. 47 / Category by norm PSV =47																				
Frost resistance value	F1																				
Picture of natural product																					



ColorQuartz GRM

Standard Colors in ColorQuartz GRM Collection:



GRM_BRBE



GRM_DKGR



GRM_DBRW



GRM_GRGR



GRM_GRSC



GRM_EBBR



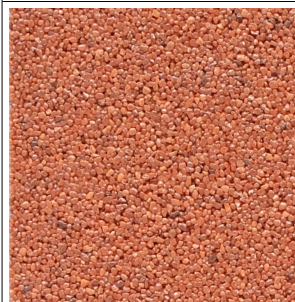
GRM_FWBR



GRM_LGRE



GRM_SEBL



GRM_SABR




GRM_MHBR



GRM_SCWA



ColorQuartz GRM

 GRM_SBGR	 GRM_VILB	 GRM_OCBR
 GRM_YEGE	 GRM_ZGLR	 GRM_SAGY
 GRM_ULMB		 GRM_11EX



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LIABILITY:

All information, guidelines and prices are based on the current, actual state. Changes can be made without prior notice. Since environmental factors are constantly changing, we cannot accept any liability in these cases. Before application you should establish whether or not our products are suitable for desired application and will meet expected requirements. Due to the natural source of the raw materials, slight differences may appear in the colours. These differences may also appear between batches and sample materials .

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