

## Technical Datasheet ESD-HM

Technical, coloured quartz grain for ESD flooring and surface treatment systems.

### Product description:

ESD-HM sand is a coloured quartz filler for polymers. It is coated in an industrial process with high grade UV resistant Polyurethane binder, it can be used to fill polymer binders like solvent-free epoxy or polyurethane resin systems. ESD-HM can be scattered on fresh polymer layers or can be used as a mortar and in plaster systems.

### Product features / benefits:

- Coloured with UV resistant Polyurethane system CfQS
- Various granulations available
- As a mortar every granulation component is exactly dosed
- Excellent conductivity

### Applications:

ESD-HM sand is specially developed to scatter on fresh polymer layers or as a mortar system. It can be used in industrial environments like electronic assembly lines, explosion sensitive environments, or technical computer server rooms.

ESD-HM is a component of conductive systems. Conductive systems and layers are part of a system. The resistance according to ANSI S20.20 norm is maximally  $3,5 \times 10^7$  Ohm. But as a technical and practical guideline the resistance of a flooring system should not exceed  $3,5 \times 10^6$  Ohm. System can be marked as conductive between 25.000 and 1.000.000 Ohm. Between 1.000.000 and 10.000.000 Ohm system can be classified as dissipative.



ESD-HM is tested as excellently suitable for specific mortar systems. As a component of a flooring mortar system total electrical resistance was tested at 800 Ohm.



**Product data:**

**Name:** -ESD-HM sand  
**HS-code:** -25.05.10  
**EINECS-nr.:** -238-878-4  
**CAS-nr.:** -14808-60-7  
**Colours:** - 1 standard natural color,  
 Other colours are available on request and if technical realisable??  
**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.

**Picture:**



**Technical data:**

**Shared:**

<b>Technical specifications:</b>	
Hardness (Mohs)	7
Content of SiO <sup>2</sup>	97,1 %
Moisture	< 0,1 %
Bulk density	1,55 kg/dm <sup>3</sup>
Density	2,65 g/cm <sup>3</sup> (DIN ISO 787/10A)
Standard granulations	ESD-HM 0, 1-0,5 mm ESD-HM 0,2-0,8 mm ESD-HM 0,5-1,0 mm ESD-HM 1,0-2,2 mm other granulations are available on request
Maximum deviation of the sieving curve	10.00%



# ESD-HM

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.

Polyurethane systems CQE / and CfQS

UV non lighted  $\Delta E=$

7,47

UV lighted  $\Delta E=$

13,61

UV stability of used pigments

The ESD-HM colors are suitable for outdoor applications. The pigments and raw materials used have full UV stability and atmospheric conditions resistance. It can be also used in indoor applications.

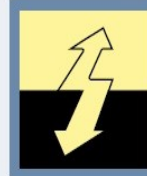
## ESD-HM colors:



ESD-HM natur 0,2-0,8mm



Electrostatic  
Discharge  
Flooring (ESD)



ESD-HM  
Excellent  
Conductivity



# ESD-HM

**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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