## **AARONIA MESH.**

# FIREPROOF SHIELDING FABRIC

40dB-108dB

Stainless steel EMC/EMF shielding mesh for usage under extreme conditions





### **Highlights:**

- Usable up to 1200° Celsius
- Half transparent
- High Attenuation
- · Odorless, rot resistant





# **Specifications**

### **Aaronia Steel Mesh**

Attenuation	108 dB at 1 kHz, 100 dB at 1 MHz, 60 dB at 100 MHz, 44 dB at 1 GHz, 30 dB at 10 GHz
Standard delivery length per unit	$1\ m\ \big(1\ m^2\big)$ Also available by the meter (up to 30 m on one piece)
Lane Width	1 m
Thickness	0,2 mm
Mesh size	about 0,1 mm
Colour	stainless steel
Weight	Approx. 400 g/m
Yield strength	220 MPa
Tensile strength	550 MPa
Hardness	180 HB
Mesh material	stainless steel
Screening performance static fields	99,9999% to 99,99999% (only with grounding)
Screening performance low electric fields	99,9999% to 99,99999% (only with grounding)

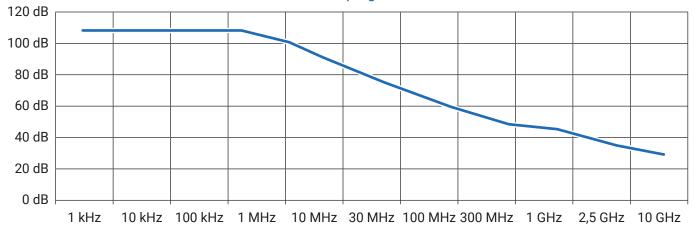
- Very transparent, perfect for shielding of window frames, windows etc.
- Usable until about 1200° Celsius
- · Extremely breathable
- Odorless
- Transparent
- · Rot resistant
- · Frost proof
- Washable
- Foldable
- Bendable

Ideal for industrial applications as well as for military, research and development. Aaronia mesh has been specifically designed for use under extreme conditions (salt air, extreme temperatures, vacuum, etc.).

Typical applications are for example Shielding of windows and window surfaces indoors and outdoors (due to the excellent transparency), construction of EMC test chambers and shielding of individual components that are under large temperature effects. Also ideal for EMC sealing of ventilation, ventilation diffusers and holes in EMC cabins due to its resistance to rust.

Aaronia mesh is made of 100% stainless steel, is temperature stable up to 1200 degrees Celsius, has an extremely high attenuation, yet is extremely breathable. The material absorbs reliable E & H fields. In particular, in the kHz and low MHz range Aaronia mesh offers an extremely high shielding factor of up to 108 dB (E-field). Aaronia mesh is easy to process and can be cut with a standard pair of scissors.

### Transmission damping chart 1 kHz - 10 GHz



### REFERENCES

### **Selected Aaronia Clients**



### **Government, Military, Aeronautic, Astronautic**

- NATO, Belgium
- Department of Defense (DoD), USA
- Department of Defence, Australia
- · Airbus, Germany
- Boeing, USA
- German Armed Forces, Germany
- · NASA, USA
- Lockheed Martin, USA
- · Lufthansa, Germany
- German Aerospace Center (DLR), Germany
- Eurocontrol, Belgium
- EADS, Germany
- Drug Enforcement Administration (DEA), USA
- Federal Bureau of Investigation (FBI), USA
- Federal Criminal Police Office (BKA), Germany
- Federal Police, Germany
- Ministry of Defence, Netherlands

### **Research/Development, Science and Universities**

- MIT Physics Department, USA
- California State University, USA
- Indonesian Institute of Sience (LIPI), Indonesia
- · Los Alamos National Laboratory (LANL), USA
- · University of Bahrain, Bahrain
- University of Florida, USA
- University of Victoria, Canada
- University of Newcastle, United Kingdom
- · University of Durham, United Kingdom
- University Strasbourg, France
- University of Sydney, Australia
- University of Athen, Greece
- University of Munich, Germany
- Technical University of Hamburg, Germany
- Max-Planck Inst. for Radio Astronomy, Germany
- Max-Planck Inst. for Nuclear Physics, Germany
- Research Centre Karlsruhe, Germany

#### **Industry**

- · IBM, Switzerland
- Intel, Germany
- · Shell Oil Company, USA
- ATI, USA
- · Microsoft, USA
- Motorola, Brazil
- Audi, Germany
- · BMW, Germany
- Daimler, Germany
- Volkswagen, Germany
- BASF, Germany
- · Siemens AG, Germany
- Rohde & Schwarz, Germany
- Infineon, Austria
- · Philips, Germany
- ThyssenKrupp, Germany
- EnBW (Energie Baden-Württemberg), Germany
- · CNN, USA
- Duracell, USA
- German Telekom, Germany
- · Bank of Canada, Canada
- NBC News, USA
- Sony, Germany
- Anritsu, Germany
- · Hewlett-Packard, Germany
- · Bosch, Germany
- Mercedes-Benz, Austria
- Osram, Germany
- **DEKRA**, Germany
- AMD, Germany
- Keysight, China
- Infineon Technologies, Germany
- Philips Semiconductors, Germany
- Hyundai Europe, Germany
- · VIAVI, Korea
- Wilkinson Sword, Germany
- IBM Deutschland, Germany
- Nokia-Siemens Networks, Germany



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