

## TECHNICAL DATA SHEET

### Silica Glass Needlemat style **DSNM12/180/H** series Description and Advantages

Darco style **DSNM12/180/H series** needlemat insulation is composed of > 72% high silica glass fibres needled together into a stronger high temperature, corrosion and vibration resistant mat. Silica Needlemat is processed in such a way to maximise thermal and acoustic insulation efficiency. It is non respirable, non-itchy, non-combustible, asbestos free and contains no chemical binders. Above all Silica Needlemat has vibration resistant properties allowing it to be successfully used for engine exhaust jacketing, turbo covers and silencer packing. Other uses include seals in the glass industry, oven insulation, industrial furnaces, boilers and kilns and is an exceptional material for use as high temperature removable reusable insulation covers.



#### Specifications

Thickness (mm)		12±1.0mm
Width		1500±3mm
Area Weight		2160±216g/m <sup>2</sup>
Density		180±18kg/m <sup>3</sup>
Breaking strength	Warp	≥35 N/50X200MM
	Weft	≥60 N/50X200MM 72
Service Temperature - Constant Max		800°C for lower shrinkage.
Melting Temp.		1700°C
Loss on heating (980°C, 30min)		≤3%
Thermal shrinkage (980°C, 60min)		≤5%
Length of roll		20+0.3m
Roll weight		64.8±3kgs
Porosity		80%-99.8%
Physiologically Harmless refer MSDS		Yes
Combustibility		Non combustible
Fibre Diameter		Approx. 6 to 9 micron
Chemical Data		SiO <sub>2</sub> ≥72.0% +- 1, Balance Al <sub>2</sub> O <sub>3</sub> and other
Coating/finishes		None

#### Thermal Conductivity

W/mk @ 130 kg/m <sup>3</sup>	0.06	0.08	0.11	0.13	0.16	0.25
Temperature	200°C	300°C	400°C	500°C	600°C	800°C