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TECHNICAL DATA SHEET

SERIES AQAMORPH Q5000S
WATER BORNE CARBON NANOTUBE FUNCTIONAL COATING

A spray coatable carbon nanotube functional coating system, developed for use as an RFI and EMI.
Shield for plastic electronic equipment housings. AQAMORPH Q5000S can be used on polycarbonate, polystyrene and foamed structures, as well as metal substrates, such as aluminum, stainless steel and copper.

SYSTEM:	1K, water borne, air / low temperature oven dry
COLOR:	Deep black
PIGMENT:	Multi-Wall Carbon Nanotubes (MWCNT)
SOLIDS:	8.6% ± 0.2% by weight
DENSITY:	1.1 ± 0.05 kg / liter
VOC:	20 grams / liter
DILUENT:	Water
DILUTION RATIO:	1 part AQAMORPH Q5000S to 1 part of soft water by volume. Dilution not recommended
ADHESION:	Excellent to most plastic and metal substrates
ATTENUATION:	5 – 10dB @ 30MHz to 20dB @ 10GHz (100um dry)
SURFACE RESISTIVITY:	<8Ohm / square@20um <4.5Ohm / square@38um
BULK CONDUCTIVITY:	>6000S/cm
COVERAGE:	4 m^2 / liter / 20um

PRELIMINARY

APPLICATION:

METHOD:	Ultrasonic Spray, HVLP or standard air gun with fluid recirculation system is recommended. A big surface is possible to paint by using brush or paint roller. Slow, continuous agitation for carbon nanotube suspension is recommended to keep it well mixed.
DRYING TIME:	5 minutes @ 95°C at 8um. Longer if thicker film; shorter if thinner film to archive desired conductivity
STORAGE LIFE:	Recommended storage in unopened containers is 12 months from date of shipment. Older materials should have all quality check requirements rechecked before using AQAMORPH Q5000S should be stored at temperatures between 15°C and 40°C in tightly sealed containers. Avoid freezing of the material! AQAMORPH Q5000S is protected against microbial attack during transportation and storage in not opened original packing. To avoid problems with microbial attack during processing and opened packaging attention should paid on hygiene. In some cases it could make sense to add biocides to avoid problem with microorganisms. We recommend using the product under safety precautions. Avoid contact with eyes and skin. Large quantities should be handled in a correctly ventilated area.
NOTE:	This product is water borne and designed for fast drying and early measuring conductivity. In hot and high humid environment the fast drying may not realize.