

ConduDisc Elite Technical Specifications

Physical Properties

Property	Typical Value	Unit	Test Method
Physical State	Black Solid		
Odor	None		
Water Permeability	1.72 x 10 ⁻⁷	cm/sec	ASTM D5084 (2.6 psi)
Flammability	No ignition		Exposed to a propane torch (~2000 °C) for 60 seconds
Electrical Corrosion Resistance Copper Steel Galvanized Steel	100 98.09 99.91	%	SAE Inc. Standard 100
Compatibility Copper Steel Galvanized Steel	Yes Yes Yes		SAE Inc. Standard 100
Environmental Impact	Neutral		Ontario Regulation 558/00 (Leachate Testing)
Freeze-thaw Withstand	30	Years	SAE Inc. Standard 102

Mechanical Properties

Property	Typical Value	Unit	Test Method
Elastic Compression 7000 kg 12 000 kg 14 500 kg 16 771 kg	2.2 (4.3) 2.6 (5.1) 3.0 (5.9) 3.1 (6.1)	mm (%) mm (%) mm (%) mm (%)	SAE Inc. Standard 103
Maximum Load Applied	16 771	kg	SAE Inc. Standard 103

Electrical Properties

Property	Typical Value	Unit	Test Method
Resistance	0.031	Ω	SAE Inc. Standard 105
Resistivity	30.39	$\Omega \cdot \text{cm}$	SAE Inc. Standard 105

Fault Current Withstand

RS Current (A)	RMS Voltage (kV)	Resistance Before Test (m Ω)	Resistance After Test (m Ω)	Approximate Temperature Rise ($^{\circ}\text{C}$)	Test Duration (milliseconds)
1040	19.5	30.6	20.3	1	508
2520	124.0	55.5	20.2	2	508
3730	239.0	44.9	46.0	13	234
4990	176.0	34.6	7.28	1	508

Leachate (TCLP) Results

Leachate Data (TCLP Procedure) based on Ontario Regulation 558/00

Constituent	ConduDisc Elite TCLP Concentration (mg/L)	USEPA Maximum Contaminant Level (mg/L)
Arsenic	BDL	0.010
Barium	1.490	2.000
Boron	1.067	2.000 *
Chromium	0.026	0.100
Mercury	BDL	0.002
Selenium	0.013	0.050
Silver	BDL	0.100 **
Uranium	BDL	0.030
Fluoride	0.190	2.000 **
Nitrate (as Nitrogen)	BDL	10.000
Nitrite (as Nitrogen)	BDL	1.000
Cyanide	BDL	0.200

BDL means the result is "Below the Detection Level" of the analytical procedure

* No MCL established; value shown is USEPA's Lifetime Drinking Water Health Advisory

** No MCL established; value shown is USEPA's Secondary Drinking Water Standard

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Coated STR Copper Wire Physical Properties

Property	Typical Value	Unit	Test Method
Concentricity	> 80	%	ASTM D3032, Section 16
Minimum Bend Radius #6 AWG #4 AWG #2 AWG 2/0 AWG	0.5 1 1 1.5	inches	SAE Inc. Standard 115
Minimum Cold Bend Radius (6° C) #6 AWG #4 AWG #2 AWG 2/0 AWG	1 1.5 1.5 2	inches	SAE Inc. Standard 115
Minimum Polymer Wall Thickness	1.3	mm	

Additional specifications and application details available as required.
Values subject to change.

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