Conducrete® Technical Specifications

Physical Properties:

Property	Typical Value	Unit	Test Method
Dry Density (powder)	1021 1.021 63.7	kg/m^3 g/cm^3 lbs/ft^3	SAE Inc. Standard 106 (dependent on compaction)
Wet Density (hardened state)	1730 1.73 108	kg/m^3 g/cm^3 lbs/ft^3	SAE Inc. Standard 106
Slurry Density (3 US Gallons/55 lb bag)	1529 1.529 95.4	kg/m^3 g/cm^3 lbs/ft^3	SAE Inc. Standard 106
Dry Volume (powder)	0.023 0.802	m^3/55 lb bag ft^3/55 lb bag	SAE Inc. Standard 106
Slurry Volume	0.025 0.886	m^3/55 lb bag ft^3/55 lb bag	SAE Inc. Standard 106
Hygroscopic Property (Water Absorption)	25.4	%	SAE Inc. Standard 110
Water Permeability	2.0×10^{-8}	cm/sec	ASTM 5084 (2.6 psi)
Compressive Strength	27.6 4003	MPa psi	CAN/CSA.A23.2-14
Electrical Corrosion Resistance Copper	95 - 100	%	SAE Inc. Standard 100
Compatibility Copper	Yes		SAE Inc. Standard 100
Environmental Impact	Neutral		Ontario Regulation 558/00 (Leachate Testing) and NSF/ANSI 60
Carbon Consumption Rate	0.5	kg/amp·year	SAE Inc. Standard 111

Electrical Properties:

Property	Typical Value	Unit	Test Method
Resistivity	2.8 – 5.0	Ω·cm	Modified ASTM G187-05
Conductivity	0.2 – 0.4	S/cm	Modified ASTM G187-05

Material Properties:

Property	Typical Value	Unit	Test Method
Physical State	Grey Powder		
Odor	None		
Setting Time	24	hours	
Cure Time	28	days	

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IEC 62561-7 Leachate Testing Results:

Procedures in EN 12457-2 and EN 12506 standards were followed. Testing was performed by Powertech Labs Inc.

Ion	Concentration (mg/L)	Amount Released (%)
Aluminum	0.68	0.000068
Barium	1.74	0.000174
Zinc	0.06	0.000006

Leachate (TCLP) Results:

Leachate Data (TCLP Procedure) based on Regulation 558 performed by Testmark Laboratories Ltd.

Constituent	Conducrete® TCLP Concentration (mg/L)	USEPA Maximum Contaminant Level (mg/L)
Arsenic	< 0.01	0.010
Barium	0.383	2.000
Boron	0.158	2.000ł
Cadmium	< 0.001	0.005
Lead	< 0.01	0.015
Mercury	0.001	0.002
Selenium	< 0.01	0.050
Silver	< 0.01	0.100*
Uranium	< 0.01	0.030
Fluoride	< 0.01	2.000*
Nitrate (as Nitrogen)	< 0.01	10.000
Nitrite (as Nitrogen)	< 0.05	1.000
Cyanide	0.05	0.200

ł 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.
Note: < denotes less than method detection limit (MDL).

NSF/ANSI 60:

Conducrete® meets NSF/ANSI 60: Drinking Water Treatment Chemicals – Health Effects.
http://info.nsf.org/Certified/PwsChemicals/Listings.asp?Company=C0169859&

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