

ConduCrete CP Technical Specifications

Physical Properties

Property	Typical Value		Unit	Test Method
Dry Density (Powder)	1159 1.159 72.40		kg/m ³ g/cm ³ lb/ft ³	SAE Inc. Standard 106 (dependent on compaction)
Wet Density (Hardened State)	1475 1.475 92.08		kg/m ³ g/cm ³ lb/ft ³	SAE Inc. Standard 106
Slurry Density	kg/m ³	g/cm ³	lbs/ft ³	
3.5 US gallons per 55 lb bag	1573	1.573	98.10	SAE Inc. Standard 106
Dry Volume (Powder)	m ³		ft ³	
55 lb bag	0.022		0.778	SAE Inc. Standard 106 (dependant on compaction)
Slurry Volume	m ³		ft ³	
3.5 US gallons per 55 lb bag	0.025		0.868	SAE Inc. Standard 106
Water Permeability	1.46 x 10 ⁻⁶		cm/sec	ASTM D5084 (2.6 psi)
Electrical Corrosion Resistance			%	SAE Inc. Standard 100
Copper	95-100			
Steel	95-100			
Galvanized Steel	95-100			
Compatibility				SAE Inc. Standard 100
Copper	Yes			
Steel	Yes			
Galvanized Steel	Yes			
Environmental Impact	Neutral			Ontario Regulation 558/00 (Leachate Testing) and NSF / ANSI / CAN 60
Carbon Consumption Rate	0.5		kg/ amp-year	SAE Inc. Standard 111

Property	Typical Value	Unit	Test Method
Physical State (Uncured)	Grey Powder		
Physical State (Cured)	Grey Solid		
Odor	None		
Working Time	Approx 30-60	minutes	
Setting Time	24	hours	
Cure Time	28	days	

Electrical Properties

Property	Typical Value	Unit	Test Method
Resistivity	< 1.0	$\Omega \cdot \text{cm}$	Modified ASTM G187-05
Conductivity	> 1.0	S/cm	Modified ASTM G187-05

NSF / ANSI / CAN 60

ConduCrete meets NSF / ANSI / CAN 60: Drinking Water Treatment Chemicals - Health Effects.

<http://info.nsf.org/Certified/PwsChemicals/Listings.asp?Company=C0169859&>

Leachate (TCLP) and NSF / ANSI / CAN 60 Results

Leachate Data (TCLP Procedure) based on Ontario Regulation 558/00. ConduCrete CP was tested to NSF / ANSI / CAN 60, section 8 for backfill applications.

Constituent	ConduCrete CP TCLP Concentration (mg/L)	USEPA Maximum Contaminant Level (mg/L)	ConduCrete CP NSF 60 Concentration (mg/L)	NSF 60 Acceptance Criteria (mg/L)
Arsenic	BDL	0.010	BDL	0.001
Barium	0.384	2.000	0.000089	0.200
Boron	0.158	2.000*		
Cadmium	BDL	0.005	BDL	0.0005
Lead	BDL	0.015	BDL	0.0005
Mercury	BDL	0.002	BDL	0.0002
Selenium	BDL	0.50	BDL	0.005
Silver	BDL	0.100**	BDL	

Constituent	ConduCrete CP TCLP Concentration (mg/L)	USEPA Maximum Contaminant Level (mg/L)	ConduCrete CP NSF 60 Concentration (mg/L)	NSF 60 Acceptance Criteria (mg/L)
Uranium	BDL	0.030	BDL	
Fluoride	BDL	2.000**		
Nitrate (as Nitrogen)	BDL	10.000		
Nitrite (as Nitrogen)	BDL	1.000		
Free 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

Soil Analysis Results

Determination of Anions in Soil Procedure was based on SW846-9056A and Determination of Free Cyanide in Soil was based on EPA OIA-1677.

Constituent	ConduCrete CP Concentration (µg/g)
Fluoride	BDL
Nitrate (as Nitrogen)	BDL
Nitrite (as Nitrogen)	BDL
Free Cyanide	BDL

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

The recommended mixing ratio for ConduCrete CP is 3.5 US gallons of water per 55 lb bag of ConduCrete CP.

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