

Advanced
Construction
Technologies

Soil Stabilization



AP MICROFINE 10

Ultrafine Cement

Product Identifier

Product Name

AP MICROFINE 10

AP MICROFINE 10 is a blast furnace slag ultrafine cement intended for use in specialty grouting applications. With a D95 particle size of ten microns and a D50 particle size of three microns, AP MICROFINE 10 is able to penetrate very small openings such as soil pores and microscopic rock fissures in order to improve strength and reduce permeability.

Supplier Details

Alchatek
4508 Bibb Blvd
Tucker, GA 30084
T: (404) 618-0438

Emergency Phone Numbers

Call CHEMTREC
Day or Night

1-800-424-9300
+1 703-527-3887

Description

AP MICROFINE 10 is a blast furnace slag ultrafine cement intended for use in specialty grouting applications. With a D95 particle size of ten microns and a D50 particle size of three microns, AP MICROFINE 10 is able to penetrate very small openings such as soil pores and microscopic rock fissures in order to improve strength and reduce permeability.

Uses

- Pre and post-excavation grouting.
- Water cut-off grouting.
- Dam and embankment grouting.
- Foundation stabilization, new and existing.
- Soil consolidation.
- Oil and gas well remediation.
- Hazardous waste containment grouting.
- Maintenance grouting of existing dams and tunnels.

Advantages

- Excellent permeability.
- Environmentally friendly.
- Long-term durability.
- Highly adaptable.
- Brine tolerant.
- Highly predictable.

AP MICROFINE 10

ULTRAFINE CEMENT

Technical Data

Physical Properties

AP MICROFINE 10	
Specific Gravity	0.11 lbs/in ³ (3.00 g/cm ³)
Loose Density	0.04 lbs/in ³ (1.00 g/cm ³)
D ₅₀ Particle Size	0.000118 in (3 μm)
D ₉₅ Particle Size	0.000394 in (10 μm)
Blaine Fineness	4638.31 ft ² /lb (950 m ² /kg)

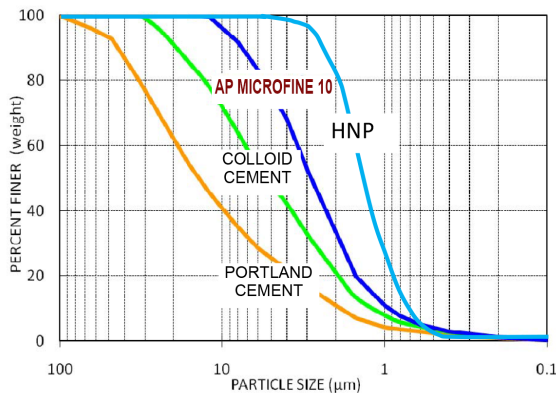
Chemical Composition (No Polluting Elements)

SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	CaO	MgO	SO ₃
30%	11%	2%	50%	5%	1%

Particle Size Comparison

	PARTICLE SIZE		SPECIFIC GRAVITY	SPECIFIC GRAVITY
	D ₉₅	D ₅₀		
Portland Cement	0.003937 in (100 μm)	0.000787 in (20 μm)	0.11 lbs/in ³ (3.16 g/cm ³)	14061.39 in ² /oz (3,200 cm ² /g)
Nittetsu Colloid	0.001575 in (40 μm)	0.000276 in (7 μm)	0.11 lbs/in ³ (3.02 g/cm ³)	27243.95 in ² /oz (6,200 cm ² /g)
AP MICROFINE 10	0.000394 in (10 μm)	0.000118 in (3 μm)	0.11 lbs/in ³ (3.00 g/cm ³)	42184.17 in ² /oz (9,600 cm ² /g)
HNP-1500	0.000197 in (5 μm)	5.9055E-5 in (1.5 μm)	0.11 lbs/in ³ (2.94 g/cm ³)	

Grain Size Distribution Curve



AP MICROFINE 10

ULTRAFINE CEMENT

Packaging

44 lb (19.96 kg) plastic pail. 6 oz (0.17 kg) bottle of plasticizer included.

Safety Precautions

Avoid contact with eyes and skin, always use personal protective equipment in compliance with local regulations. Read the relevant Safety Data Sheet before use. Safety Data Sheets are available on Alchatek.com. When in doubt contact Alchatek Technical Service.