A. McNitt & SerenSoil Testing

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Sample:

Sample Submitted By:

Date Received:
Testing Dates:
Report Date:

Particle Size Analysis

		Pro Mix	Int. Mix	Rec. Mix
% Gravel	0.8%	≤ 5%	≤ 5%	≤ 5%
% Sand	62.9%	58% - 62%	65% - 69%	70% - 75%
% Silt	19.2%	38% - 42%	31% - 35%	25% - 30%
% Clay	17.1%			

Sand Sieve Size Analysis (ASTM F1632-03)

		Pro Mix	Int. Mix	Rec. Mix
Gravel (> 4.0 mm)	0.0%	0%	0%	0%
Fine Gravel (4.0 - 2.0 mm)	0.8%	≤ 5%	≤ 5%	≤ 5%
Very Coarse Sand (2.0 - 1.0 mm)	9.5%	38% - 45%	45% - 50%	> 50%
Coarse Sand (1.0 - 0.5 mm)	14.4%			
Medium Sand (0.5 - 0.25 mm)	23.5%			
Fine Sand (0.25 - 0.15 mm)	9.1%			
Fine Sand (0.15 - 0.10 mm)	3.2%			
Very Fine Sand (0.10 - 0.05 mm)	3.2%			
Silt (0.05 - 0.002 mm)	19.2%	38% - 42%	31% - 35%	25% - 30%
Clay (< 0.002 mm)	17.1%			

Angularity / Sphericity	Acid Reaction	D15	D85
Sub-Rounded / Medium Sphericity	Slight	< 0.002mm	0.80 mm

Soil Textural Class	Silt / Clay Ratio	Color* - Dry	Color* - Wet
Sandy Loam	1.1	2.5YR 5/4	2.5YR 4/4
		Reddish Brown	Reddish Brown

*Munsell Soil Color Chart

Comments

Mix tested as received. There are currently no widely accepted standards for baseball infield mixes. Example specifications of common professional, intermediate, and recreational infield mixes are shown above for reference. This mix generally falls between the Pro and Intermediate category. In general, infield mixes that tend to perform the best contain around 70% sand, with the majority of sand in the coarse and medium categories. For fields with limited or no access to water and a low maintenance level, mixes containing 70 to 75% sand often perform well. For more intensely-managed fields with access to water and tarping, mixes with 65 to 70% sand often perform well. Professional stadiums under intense maintenance sometimes have less sand. Mixes with higher than the typical range of 65 to 75% sand can be unstable and mixes with less sand than the recommended range often remain wet for longer periods of time, require routine grooming, and may crack when dry. Silt to clay ratios of between 0.5 and 1.0 are typically desirable. Additional information on selecting and maintaining infield mixes can be found in ASTM F2107-08. It is important to note that skinned infield mixes are not designed to vertically drain. Therefore, it is important that the grade be sloped (0.5 - 1.5%) to allow water to sheet off the surface.