

SlurryPro° CDP°

Physical Data:

Appearance: Opaque to White free flowing granular solid

Odor: Odorless pH: NA Freeze Point: NA

Specific Gravity: 1.00-1.01 (Water = 1.0)

Description & Function:

The SlurryPro CDP system is designed for preparation of viscous earth-stabilizing fluids or slurries to stabilize even the most challenging soil environments in a variety of excavation techniques including drilling, trenching, tunneling and diaphragm wall applications in the geoconstruction industry.

General Application Instructions:

KB recommends CDP initially be mixed at a around a rate of 0.75 to 1.25 kg/m³ of fresh water. For larger projects this should be done in a properly designed mixing tank, please see KB's "Mix Tank Diagram" for specifics. Many contractors find they can start with lower dosages and adjust as required for stability. On smaller projects or highly mobile projects, such as power lines, CDP may be applied at the point of excavation. Typical product consumption rates are suggested to be as follows, again many contractors find less is acceptable:

Formation Type	Suggested	Typical Marsh Funnel Visc.		
	lbs/yd³	lbs/1000 gals	kg/m³	sec/qt
Clay & Shale	1.687-2.109	8.345-10.432	1.0-1.25+	60-75±
Silt & Fine to Medium Sand	1.687-2.531	8.345-12.518	1.0-1.5+	65-100±
Coarse Sand to Pea Gravel	2.025-3.037	10.014-15.022	1.2-1.8+	75-100±
Gravel to Cobbles	2.109-3.375	10.432-16.691	1.25-2.0+	85-100+

Formation Type	Suggested Slu	Typical Marsh Funnel Visc.		
	lbs/yd³	lbs/1000 gals	kg/m³	sec/qt
Clay & Shale	1.012-1.519	5.007-7.511	0.6-0.9+	60-75±
Silt & Fine to Medium Sand	1.181-1.687	5.842-8.345	0.7-1.0+	65-100±
Coarse Sand to Pea Gravel	1.266-2.025	6.259-10.014	0.75-1.2+	75-100±
Gravel to Cobbles	1.266-2.109	6.259-10.432	0.75-1.25+	85-100+

Additional CDP may also be introduced at the point of excavation through a KB Eductor or into the mix tank or agitated slurry storage tanks. The addition of small quantities of CDP at the hole provides the following benefits: rapid increase in viscosity to stabilize highly permeable soils and immediate intervention in case of emergencies or other atypical situations. When adding SlurryPro CDP at the point of excavation, please pour CDP slowly into a KB Eductor feeding into an adequately flowing stream of slurry emptying into the excavation. SlurryPro CDP may also be added directly to the stream of fluid flowing into a pile while the excavation tool is one meter (3 feet) below the surface of the slurry and rotating to form a vortex within the slurry column. Avoid clumping the dry CDP into "white gel balls" in the slurry by slowly sifting product into the fluid stream. Feeding CDP too quickly with lack of proper agitation causes balling of the polymer particles into "fish eyes" and larger polymer masses wasting CDP. After adding CDP to the any excavation, raise and lower the excavation tool from the top of the hole to the bottom to assist in proper distribution of the product throughout the slurry column. The slurry viscosity within the excavation should never be allowed to drop below 55 seconds per quart regardless of what type of soil is being excavated.

At least one sedimentation tank is always recommended for recaptured slurry to pass through prior to the mix tank and the re-addition of CDP. The dosage rate of the SlurryPro CDP synthetic polymer in the initial make-up water should err on the side of caution and use the higher levels recommended in the dosage chart. Only after the slurry has been established and a secure dosage and viscosity obtained should the dosage be reduced.

When excavating in more challenging formations, appropriate slurry Additives are recommended in combination with a SlurryPro system to increase slurry stabilization performance. The more challenging the formation type the more benefit will be realized from various SlurryPro Specialty Additives. Unusual site conditions may arise during actual excavation, in which case the recommendations from KB technical personnel must always be followed.

Special Operational Precautions and Instructions:

It is suggested from experience, the specific gravity of a SlurryPro CDP fluid should not exceed 1.04 under normal operating conditions. If low hydrostatic conditions are encountered where the water table is less than 3 meters or 10 feet beneath the slurry level, the specific gravity of the slurry should be increased as required using Weightlt to raise the slurry S.G. accordingly.

Due to the unique characteristics of a KB Earth Stabilization System as compared to bentonite, several key operational procedures are recommended to be modified from bentonite systems. These modifications will have a major impact on the overall effectiveness and successful use of KB International's Earth Stabilization Systems. For smaller projects, please consult KB International's "General Operating, Product Addition, and Testing Procedures." For larger or more complicated projects, please contact KB International for specific project planning.

Packaging:

10 kilo / 22 lb. resealable plastic pails & 25 kilo / 55 lb. poly bags

Availability:

SlurryPro CDP is available out of KB International's Charleston, SC warehouse and various other regional warehouses. Please check for availability in your area.



Technology to Build On!

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