



## SlurryPro® MPA™

### Physical Data:

Appearance:	Slightly amber to clear liquid
Odor:	Slightly Odor
pH:	NA
Freeze Point:	34° F
Specific Gravity:	1.00 - 1.01 (Water = 1.0)

### Description & Function:

SlurryPro MPA is a synthetic polymer in liquid form which functions with SlurryPro CDP and SlurryPro LA-1-D or a SlurryShield® fluid to form a more tenacious and less permeable polymeric membrane at and within the formation interface. It also promotes a soft grouting effect within the membrane area in porous soils. MPA additionally functions within KB Systems to assist in dropping light suspended solids from the slurry. MPA also increases the soil stabilization properties of a SlurryPro System or a SlurryShield fluid.

### General Application Instructions:

MPA should be used in a **VERY DILUTE** form at a ratio of approximately 2.0% to 5.0% or less concentration (200 to 450 ml of MPA as is to 20 liters of water). The water and MPA solution should then be vigorously mixed to insure a homogeneous solution is obtained. This dilute MPA solution should be slowly added in 300 ml to 750 ml slugs being slowly poured into the slurry stream as it fills the excavation. Dilute MPA solution may also be spot applied by placing 2 liters to 10 liters of the MPA solution into a zip lock baggy. Place a weight in the baggy, such as a rock or small piece of rebar, to assist in sinking the bag to the bottom of the excavation. The baggy should be punctured two or three times just below the zip lock to insure any captured air can escape allowing the bag to sink. These punctures also allow for product distribution throughout the slurry column. KB has nicknamed this addition method a “bomb” addition. Once the dilute MPA “bomb” has been dropped to the bottom of the excavation, the digging tool should be placed back in the excavation and lowered to the bottom to crush the “bomb”. After crushing the bomb the excavation tool should be slowly rotated or manipulated while raised and lowered approximately 3 meters or ten feet within the slurry column. Then excavation should resume.

When used to assist in chemical grouting of an unstable or sloughing sidewall, the dilute MPA should be added at the surface to the incoming slurry stream. During signs of sidewall instability, the MPA solution should be added on each withdrawal of the excavation tool at a rate of 3 liters to 8 liters. When this procedure does not completely stabilize the sidewall KB's InstaFreeze System should be immediately applied.

Application of MPA for bottom cleanout should only be attempted after ImPac has been applied correctly and cutting or fines persist. If applied prior to excavation completion and clean out, the **VERY DILUTE** solution of SlurryPro MPA may be delivered to the bottom of the excavation in bomb form. The excavation tool should then be lowered and slowly manipulated to break the MPA bags. After breaking the bombs the tool should be raised and lowered approximately 3 meters (10 feet) off the bottom of the excavation. This raising and lowering process should be repeated twice. The excavation tool should then be placed on the bottom of the excavation and one last bite taken from the base of the excavation to assist in forming a seal at the base of the bucket or grab's jaws preventing them from leaking spoils as they are withdrawn. The tool should then remain at rest on the bottom of the excavation for a few minutes allowing the MPA solution adequate time to react with the fines within the slurry column above the excavation tool. The clean-out bite should then be slowly withdrawn from the excavation.

If the fluid does not meet the sand content specification a bomb of dilute MPA solution should be placed and applied with the excavation tools as described above. Dilute MPA solution should also be added at the surface if possible while having the excavation tool trip up and down the length of the excavation a few times. Clean-out passes with a properly designed clean-out bucket or grab should continue until the **sand content reads less than 1% entrained sand**. If the fluid still does not meet the sand content specification, repeat the above procedure adding more dilute MPA solution in bags. **Please note the overuse of MPA or the application of undiluted MPA can result in dramatically decreasing the viscosity of the slurry, thereby increasing the consumption of CDP in the excavation and possibly cause other deleterious effects within the SlurryPro system and excavation. 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:

The specific gravity of a KB slurry containing MPA 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 Weightltt 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 should 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:

SlurryPro MPA is available in: 20 liter / 5 gallon resealable plastic pails

## Availability:

SlurryPro MPA is available from KB International's warehouses in these geographical areas:

Charleston, SC USA & Dubai, UAE



# Technology to Build On!™

**KB International LLC • 735 Broad Street, Suite 209 • Chattanooga, TN 37402**  
**Phone: 1 (423) 266-6964 • Fax: 1 (832) 201-9196 • email: info@kbtech.com • www.kbtech.com**

The information in this product brochure is given in good faith and is accurate to the best of our knowledge. Because we can neither anticipate nor control the different conditions under which this information is given in good faith and is accurate to the best of our knowledge. Because we can neither anticipate nor control the different conditions under which this information and our products are used, we make no warranty of performance or this estimate expressed or implied. Typical properties given herein are not specifications. Our policy is to continually review historical site data, product formulations and manufacturing to assure technical suitability and cost-effectiveness. Product characteristics are subject to change without notice. Users of our products are responsible for compliance with government regulations and patent laws. The Synthetic Slurry Systems and Products are covered by the following US Patent's, 5,407,909; 5,663,123; 6,248,697; and 6,897,186 and various corresponding International patents. Other U.S. and International patents pending. All users should discuss the product with an appropriate representative of KB International, LLC before utilizing the product. SlurrySMART®, HydroCUT®, SlurryShield®, SlurryPro®, HydroCUT®, EnhancIT®, SeaDrill®, SandSeal®, and InstaFreeze® are all registered trademarks of KB International LLC.