



# KB-1® Primer – Instruction Sheet



**KB-1® Primer is used to prepare anaerobic water to disperse electron donors and protect anaerobic bioaugmentation cultures during injection into aquifers. KB-1® Primer is provided:**

- In pre-weighed pouches that are designed to treat 250 gallons (or ~ 1,000 Liters) of water;
- In pre-weighed pouches that are designed to treat 1,000 gallons (or ~3,800 Liters) of water; or
- In 50-pound buckets that can be weighed in the field for custom sizes.

**The recommended dosing is 0.8 g/L of KB-1® Primer in water. KB-1® Primer at this dosing rate is designed to reduce water to <-75 mV ORP within two hours while keeping the pH in the 6.0 to 8.5 range. The ORP will continue to decrease with time, the more time the KB-1® Primer has to react the better its performance will be.**

## PREPARING TOTES/TANKS OF ANAEROBIC WATER

- Start by filling the tote/tank with water (ground or municipal water source) up to approximately 25% of the volume
- While the tote/tank is filling with water, prepare the KB-1® Primer slurry;
  - Add contents of the KB-1® Primer pouch to an empty pail and fill partially with water. If using KB-1® Primer from a bucket, weigh the amount of KB-1® Primer required for the tote/tank, add into the empty pail and fill partially with water.
  - Mix the pail thoroughly – in most cases the action of the water filling the bucket will provide enough mixing to make the slurry. If required, paint mixers are an effective method for mixing the KB-1® Primer slurry.
- Pour the slurry into the tote/tank, rinsing out any undissolved solids
- Finish filling the tote/tank. Fill the tote/tank as full as possible to limit headspace. Cover the tote/tank with a vented lid.

## KB-1® PRIMER WATER STORAGE

- Keep a minimal headspace within the tote/tank to reduce possible oxygen exposure
- When a minimal headspace is not possible, purge the headspace with nitrogen/argon gas

## TIPS FOR OPTIMAL KB-1® PRIMER PERFORMANCE

- Avoid mixing KB-1® Primer continuously for long periods of time as it may reintroduce oxygen into the solution.
- Avoid adding KB-1® Primer powder to a full tote/tank without first making the slurry as it may not dissolve fully, resulting in reduced product performance.
- If electron donor solution is being made anaerobic with KB-1® Primer; it is recommended to prepare the KB-1® Primer water in the tote/tank first. After the water has achieved reducing conditions it can be used to prepare the electron donor solution.

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**For additional information refer to the KB-1® Primer safety data sheet (SDS)**

**Contact SiREM for Customer Support**

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