



TECHNICAL DATA SHEET

FRAC POWDERS

TECHNOLOGY DESCRIPTION: Slow Release Powders

In theory, powders offer a “high percent active” treatment option. In reality, most powders or solids contain a very low percentage of actives and a high percentage of inert fillers or binders. Additionally, dissolution rates tend to vary. A patented alternative addresses these issues along with providing other benefits. The Frac Powders allow for any liquid or combination of liquids (even if the liquids are not compatible) to be converted to a high liquid, solid. The liquid concentration is 70%. Additionally, this patented process allow for the dissolution or chemical release rate to be adjusted and maintained throughout the complete dissolution process. Finally, the solid can take the form of a fine powder or various size pellets or tablets.

FEATURES

- No feed pumps, storage tanks or containment is required
- Solids contains 70% liquid
- Powder versions are significantly safer to handle than the liquid versions.
- Continuous treatment provided.
- Dissolution rate can be adjusted and lower end rates are 1-2 ppm
- No electricity required
- Product is available as fine powder or in various size pellets or tablets.
- Multiple chemistries can be put into a single powder or pellet

APPLICATION

Typically, the appropriate amount of product is “slurried” and pumped down-hole with the other frac fluids/materials. It can however, be applied by itself. Additionally, it can be applied via any one of many dilution vessels, from baskets to flow through vessels. In these instances, dosage rates are determined by volume of product, water temperature and water flow. Contact your manufacture for specific recommendations.

PRODUCTS AVAILABLE

As mentioned above, any liquid can be converted into a slow release powder. Not only is this ability unique, but the chemical technologies that form the basis for the product line are proprietary. Below is a brief overview of the primary chemistries that can be converted to powders.

Chisel Xtreme Chisel Xtreme is a drop-in replacement for 35% Hydrochloric Acid. It provides all the ability to dissolve mineral deposits of HCl without any of the side effects. It is non-corrosive and will not harm rubber, glass or other materials of construction. Even with this ability, it does so with a triple-zero Hazardous Material Information Score (HMIS), which means it is non-flammable, non-corrosive, non-toxic and non-irritating.



- Syn-Caustic** Syn-Caustic is a drop-in replacement for 50% Sodium Hydroxide. It is non-corrosive and will not harm rubber, glass or other materials of construction. Even with this ability, it does so with a triple-zero Hazardous Material Information Score (HMIS), which means it is non-flammable, non-corrosive, non-toxic and non-irritating.
- Enviro Sulfa-Bind** Enviro Sulfa-Bind is a unique hydrogen sulfide scavenger. The hazardous H₂S is converted to a completely safe, water-soluble sodium sulfate and does not generate an elemental sulfur by-product. The application simplicity and lack of generation of any kind of hazardous by-product, makes it ideal for all locations including space-limited off-shore applications.
- Petro-Boost** Petro-Boost offers solutions to many hydrocarbon, paraffin and asphaltene based problems. The products combine a unique blend of surface-active compounds with several proprietary solubilization chemistries that are derived from an environmental waste stream. Furthermore, the product line is now "*Driven by Nano Muscle*".
- TDY Series** The "TDY" Series of products are proprietary blend of ingredients that is designed to remove hydrocarbons from inorganics in such a manner as to not allow the hydrocarbons to re-attach. It changes the charge between the hydrocarbon molecule and the inorganic matter to which it clings. As such, it significantly improves flow-ability and keeps the treated sludge, heavy oils, etc. from "sticking" to surfaces.
- H2O-C** H2O-C is a unique compound to be used to "condition" water. It can be used to address a wide range of water quality issues.

NOTE: All the above products are also available as liquids.

PACKAGING

The Frac Powders are shipped from the manufacturing facility and regional distribution centers in 45 pound pails, 450 pound fiber drums or 2500 pound super sacks. Bulk quantities are available upon request.

ADDITIONAL INFORMATION

If you need additional information, please contact our offices.