

FROM PA DEP 12/08

Frac Water Chemicals Chemical Components (From MSDS)

2,2-Dibromo-3-Nitrilopropionamide
2-butoxyethanol
2-methyl-4-isothiazolin-3-one
5-chloro-2-methyl-4-isothiazotin-3-one
Acetic Acid
Acetic Anhydride
Aliphatic Acid
Aliphatic Alcohol Polyglycol Ether
Ammonia Persulfate
Aromatic Hydrocarbon
Aromatic Ketones
Boric Acid
Boric Oxide
Butan-1-01
Citric Acid
Crystalline Silica: Cristobalite
Crystalline Silica: Quartz
Dazomet
Diatomaceous Earth
Diesel (use discontinued)
Ethane-1,2-diol
Ethoxylated Alcohol
Ethoxylated Alcohol
Ethoxylated Octylphenol
Ethylene Glycol
Ethylhexanol
Ferrous Sulfate Heptahydrate
Formaldehyde
Glutaraldehyde
Glycol Ethers
Guar gum
Hemicellulase Enzyme
Hydrochloric Acid
Hydrotreated light distillate
Hydrotreated Light Distilled
Isopropanol
Isopropyl Alcohol
Magnesium Nitrate
Mesh Sand (Crystalline Silica)
Methanol
Mineral Spirits
Monoethanolamine
Petroleum Distillate Blend
Petroleum Distillates
Polyethoxylated Alkanol (1)
Polyethoxylated Alkanol (2)

Polyethylene Glycol Mixture
Polysaccharide
Potassium Carbonate
Potassium Hydroxide
Prop-2-yn-1-01
Propan-2-01
Propargyl Alcohol
Propylene
Sodium Bicarbonate
Sodium Chloride
Sodium Hydroxide
Sucrose
Tetramethylammonium Chloride

Frac Stage #1

Hydrochloric Acid
Propargyl Alcohol
Methanol
Acetic Acid
Acetic Anhydride

Frac Stage #2

Methanol
Boric Oxide
Petroleum Distillate Blend
Polysaccharide
Potassium Carbonate
Sodium Chloride
Potassium Hydroxide
Ethylene Glycol
Boric Acid
Sodium Bicarbonate
Monoethanolamine

Frac Stage #3

Hydrotreated light distillate
Ethoxylated Alcohol
Glutaraldehyde
Dazomet
Sodium Hydroxide
Methanol
Diesel (use discontinued)
2,2-Dibromo-3-Nitrilopropionamide
Polyethylene Glycol Mixture
Mesh Sand (Crystalline Silica)
