Potassium Chloride (Dry)

Potassium Chloride (KCl) powder is a high-purity, dry crystalline inorganic salt used to form clear brine used in workover and completion operations which require densities ranging from 8.4 to 9.7 lb/gal (1007 to 1162 kg/m³).

**Typical Physical Properties**

- Physical appearance: White, free-flowing crystals
- Specific gravity (powder only): 1.98
- Purity: 98%
- Solubility @ 70°F (21°C): 32 g/100 mL water

**Applications**

Potassium Chloride powder is mixed with water to form clear-brine workover and completion fluids with densities ranging from 8.4 to 9.7 lb/gal (1007 to 1162 kg/m³).

Potassium Chloride brines are especially beneficial due to excellent shale stabilization in water-sensitive clay/shale formations and clay-containing sandstones. It is often used to enhance inhibition in other brine systems.

KCl solutions become saturated around 24% by weight or near 9.7 lb/gal (1162 kg/m³). Because the dissolution rate decreases near saturation, good agitation and heat can be required to attain 9.7 lb/gal (1162 kg/m³) with a crystallization temperature near 59°F (15°C).

Note: Use the Mixing Tables to obtain the desired density

**Toxicity and Handling**

Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the Material Safety Data Sheet (MSDS).

**Packaging and Storage**

Potassium Chloride (dry) is packaged in 50-lb (22.7-kg) and 100-lb (45.4-kg), multi-wall, waterproof sacks.

Store in a tightly closed, original container in a well-ventilated area.