



POTASSIUM CHLORIDE (POTASH)

DESCRIPTION

Potassium Chloride (KCl) is an odourless white crystal, which forms a neutral salt solution with water. Potash purity is expressed as percent K₂O.

$$63\% \text{ K}_2\text{O} = 100\% \text{ KCl}$$

PROPERTIES

Physical		Chemical	
Appearance:	White crystalline powder	Type:	Salt
Specific Gravity:	1.98	Solubility:	Soluble (water)
Bulk Density:	Varies with grade	pH:	5.4-8.6 (5% solution)
Flash Point:	Not flammable	Microtox:	Not applicable

APPLICATION

Generally used to provide Potassium (K⁺) ions in shale inhibiting drilling muds. The K⁺ ion provides a strong bonding ion between the clay platelets thus inhibiting the swelling of shales. Use in concentrations of 30.0-150.0 kg/m³.

The K⁺ ion is absorbed onto the clay and is thus depleted from the system. The rate of absorption is related to the reactivity of the shale.

$$10 \text{ kg/m}^3 \text{ KCl} = \text{approx. } 5250 \text{ mg/l K}^+$$

MIXING AND HANDLING

Potash mixes readily in water and can be mixed directly through the hopper. Avoid breathing dust while mixing. It is advisable to use a dust mask and eye protection while mixing all powdered products.

WHMIS: Not controlled	TDG: Not regulated	PACKAGING: 25 kg sack
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