

ZINC CARBONATE/HYDROGEN SULPHIDE GAS SCAVENGER

GENERAL INFORMATION

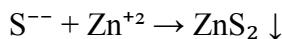
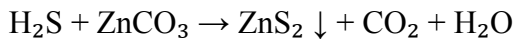
Zinc Carbonate is a high purity, water insoluble zinc carbonate primarily used as hydrogen sulphide gas scavenger in drilling mud systems to form insoluble zinc sulphide.

TYPICAL PROPERTIES

Molecular formula	ZnCO ₃
Zn	50-55%
Fe	0.20% max
Pb	0.1600% max
Cd	200 ppm max
Moisture	0.2 max
Insoluble in HCl	0.5% max
Insoluble in Water	99.8% min

PRODUCT APPLICATION

Zinc Carbonate is a high purity hydrogen sulphide gas (H₂S) and soluble sulphide ions (S⁻²) scavenger, where it reacts with sulphide ions to form insoluble zinc sulphide;



The reaction is irreversible, and thus the precipitant ZnS will not decompose to form again free sulphide ions. The insoluble ZnS₂, thus will be eliminated from the mud system on the shale shakers and through solid removal equipment.

Zinc Carbonate is applicable in all types of mud systems and does not have adverse effects on the rheological properties of the mud system.

The mud systems should always be pre-treated with Zinc Carbonate sulphide scavenger during drilling operations, where H₂S is expected.

PRODUCT TREATMENT

Zinc Carbonate is a free flowing heavy powder, which should be mixed through the hopper. The initial pre-treatment of any mud system should be 2 ppb of Zinc Carbonate where the pH of the mud system should always be more than 9.5. Once the mud system is contaminated with H₂S or soluble sulphide ions from the formation water, the dosage should be increased to 3-4 ppb in addition to caustic soda to keep the pH more than 9.5, to ensure complete elimination of sulphide ions.

PACKAGING

Zinc Carbonate is packaged in 25 kg bags with P/E liner.