

INFORMATION

KLEEN-PIL

NON-DAMAGING, ACID SOLUBLE LOST CIRCULATION PILL

DESCRIPTION

KLEEN-PIL combines all of the necessary materials to combat severe lost circulation problems in one sack. The product may be mixed in fresh water, sodium chloride, or calcium chloride brines of any concentration. Extensive field and laboratory testing have proven this mixture to be essentially non-damaging to producing formations.

Form	Powder
pH	9 - 10
(fresh water Suspension w/ 50 ppb of product)	
Solubility in 15% HCl	Greater than 96%
Viscosity	80 Sec/Qt min
(Funnel Viscosity of a pill containing 50 ppb of product)	

APPLICATION

KLEEN-PIL should be used as a pill for spotting across lost circulation zones and/or perforated intervals. The lost circulation pill should always be mixed using a concentration of one sack (50 lb) of KLEEN-PIL per bbl of water. The volume of the pill may vary from 10 to 50 bbl depending on the perforated interval, size pipe, or severity of lost circulation.

KLEEN-PIL contains no clays, guar gums or other inert materials which might cause permanent damage to a producing formation. It is completely acid soluble.

KLEEN-PIL "filter cakes" will not hinder clean-up procedures on a producing zone following a workover, completion, or drilling operation. "Filter cakes" of KLEEN-PIL may be removed by treating with 15% hydrochloric acid.

Complete lost circulation may require the addition to the pill of 10 to 50 ppb of KLEEN-BLOCK or KLEEN-BLOCK-X.

Any fluids which are to be circulated past the sealed-off zone should be treated with 6 to 8 ppb KLEEN-SEAL.

MIXING PROCEDURES

KLEEN-PIL may be mixed using any mixing system which provides good agitation. The pill (50 ppb KLEEN-PIL) should be agitated from 20 to 30 minutes before pumping downhole.

PACKAGING

KLEEN-PIL is packaged in 50 lb sacks.

KLEEN-PIL is a Messina trademark