



## KOV'R-KOTE VS. Z-50

Typical Properties	50% Zinc	KOV'R-KOTE
Appearance	Grey paste	Black grainy grease
Specific Gravity	1.78	1.22
Density, lbs/gal	14.8	10.20
Cone Penetration	300	322
Dropping Point	>185 °C	>232 °C
4-Ball Weld Point, Kg	400	1000
Hydrogen Out-gassing Potential (In the presence of moisture)	High	None
Friction Factor	1.0	1.0
NC 46 Tool joints doped per Kg. (Due to specific gravity difference)	17	25
Heavy metal content	50%	Nil
Service Temperature	-18° to 150 °C	-18° to 232 °C

Zinc based compounds have been utilized for decades in oil well drilling applications. Down hole, while drilling, the potential exists for unlimited contact with moisture. Low level moisture is controlled with hydrophilic silica or calcium oxide but continued contact with moisture can lead to undesirable reactions with zinc such as the potential for fire and the release of hydrogen gas. It can also react with the grease thickener causing it to convert back to a liquid.

Hydrogen gas can cause embrittlement with steel, is corrosive and can readily react with sulfur in the environment to form toxic hydrogen sulfide gas. The reactivity of the zinc with the thickener is why zinc compounds rarely perform at temperature above 130°C.

KOV'R-KOTE is metal free and thus stable at much higher temperatures. The frictional properties were designed to match those of 50% zinc formulations. With the high cost of metals and the fact it can cover more connections per kilogram, KOV'R-KOTE is an economical alternative with upgraded performance and service temperature to zinc based products.

XTEX stocks KOV'R-KOTE in in 4 and 20 liter pails.