

COMPONENTS

HiTEC[®] 082

Alkylated Sulfone Seal Swell Agent



Suited for Industrial and Automotive Lubricants

HiTEC[®] 082 Alkylated Sulfone

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Application

HiTEC[®] 082 is a highly polar but relatively inert solvent which is used in a variety of applications where these properties are desirable. It may be used as an additive in lubricants in order to improve the solubility characteristics of other polar chemistry, and in order to prevent seals that the lubricant may contact from shrinking or from hardening.

Key Performance Benefits

- Metal Free
- Chlorine Free
- Good handling characteristics

Comparison of HiTEC[®] 082 Seal Swell Properties, Vol% Change

	0 wt% control	0.5 wt%	1 wt%	1.5 wt%
Polyacrylate	0	1.1	2.1	3.2
Fluoroelastomer	0	0.4	1.4	2.5
Nitrile	0	0.9	1.9	2.9

Typical Characteristics

Appearance	Clear to slightly hazy yellow liquid
Density, lbs/gal.	8.58
Specific Gravity @ 15.6/15.6°C	1.030
Viscosity @ 40°C, cSt	25.0
Flash Point, °C (PMCC)	110 min.

Handling Information

Max Handling Temp: 70°C, Shelf life: 18 months @ 10-40°C

Seal Swell Agent Chemistry

Chemistry	Example	Strength
Sulfone	HiTEC [®] 082	Low concentrations have large effect

Recommended Dosage

HiTEC[®] 082 is recommended between 0.5% wt. and 1.5% wt. in lubricants comprising high levels of group II, III or IV base oil to bring elastomer properties. Required treat rates may be influenced by a number of factors, including:

- Base oil
- Other additives present
- Elastomer composition
- Temperature
- Application

Please contact your Afton Chemical representative for specific recommendations.

Seal Swell Properties

