



LS1050

additive supplement

**Lone Star
Enterprises**

Description

LS1050 is a lubricating oil supplement additive, which provides good anti-wear activity and bearing corrosion protection. It is particularly effective under the severe temperature and load conditions encountered in both diesel and gasoline engines and gears. In this formulation, the dispersant component is also used. The existence of the some percentage of dispersant has made the formulations very efficient.

Recommended Dosage (formulation)

	API: CD (mono)	API: SC/CC (mono)
Base Oil SAE40 (VI80)	87.8 wt%	88.7 wt%
LS Complement Additive LS1050	1 wt%	0.6 wt%
high base calcium sulfonate 400TBN	1.5 wt%	1 wt%
PPD	0.1 wt%	0.1 wt%
VII (10% solved in SAE40)	9 wt%	9 wt%
Anti-Foam	20 ppm	20 ppm

Typical Properties

<i>Property</i>	<i>Unit</i>	<i>Value</i>	<i>Method</i>
Density @ 15 C	kg/m ³	1100-1160	ASTM D4052
Flash Point (Open Cup)	° C	200	ASTM D92
Viscosity at 100°C	cSt	13-15	ASTM D445
Zinc	mass %	7.-8	ASTM D6595
Phosphorus	mass %	6.5-7.5	ASTM D6595
Calcium	mass %	0.35-0.45	ASTM D6595
Total Base No.	mg KOH/g	12-18	ASTM D2896

Storage and Handling

Follow precautions normally taken for handling lube oil stocks. This product is temperature sensitive. Do not heat over the maximum loading / unloading temperature to avoid possible release of extremely odorous alkyl mercaptans and/or toxic hydrogen sulfide. Localized high temperatures should be avoided during heating, especially when product cannot be agitated. Electrical, steam or hot oil heating systems with a self-limiting maximum temperature not exceeding 120 Deg. C/250 Deg. F (e.g. low pressure steam at 2 bar (g) or 30 psig) is recommended.

- Max Storage Temperature: 60 °C (140 F)
- For detailed data please refer to the relevant MSDS

The information presented in this document is based on the studies provided and based on the LONESTAR approved laboratory under our expert control. Therefore, all recommendations are made without guarantee since the conditions of use are beyond our controls. So, LONESTAR enterprise rejects any responsibility for using this information or suggestions out of these conditions. In addition, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use.

Version 7.10

LONE STAR EFFICIENT FORMULATION