

NA-SUL[®] ZS-HT

NA-SUL ZS-HT is an outstanding rust and corrosion inhibitor displaying exceptional rust protection with outstanding high temperature stability and good demulsibility. **NA-SUL ZS-HT** is synergistic with primary antioxidants in polyalphaolefin based lubricants.

CHEMICAL

COMPOSITION: Zinc alkyl naphthalenesulfonate/carboxylate in light mineral oil.

APPEARANCE: Clear brown viscous liquid.

TYPICAL

PROPERTIES:	Zinc Content	3.8%
	Viscosity @ 40°C (ASTM D 445, DIN 51 550)	400 mm ² /s (cSt)
	Viscosity @ 100°C (ASTM D 445, DIN 51 550)	30 mm ² /s (cSt)
	Density @ 15.6°C (ASTM D 4052)	1.0 g/ml
	Weight Per Gallon @ 25°C	8.3 lbs
	Flash Point, COC (ASTM D 92, DIN 51 376)	165°C (329°F)

Note: The above analytical data are not specifications.

	<u>Typical Treat Levels</u>
APPLICATIONS: Rust Preventive Fluids	1.00% - 15.0%
Hydraulic Fluids (HF-2)	0.05% - 0.5%
Circulating Oils	0.05% - 1.0%
Paper Machine Oils	0.25% - 1.0%
Greases	0.50% - 3.0%

NA-SUL ZS-HT is an excellent rust and corrosion inhibitor when used in a variety of petroleum and synthetic lubricants. **NA-SUL ZS-HT** is ideally suited for formulating hydraulic oils, circulating oils and gear oils where good anticorrosion, hydrolytic and thermal stability as well as outstanding demulsification properties are required. **NA-SUL ZS-HT** performs very well in both acidic and neutral conditions. In lubricant oxidation tests, **NA-SUL ZS-HT** is compatible with a wide range of additives and is synergistic with commonly used aminic and phenolic oxidation inhibitors in polyalphaolefin base fluids. **NA-SUL ZS-HT** also enhances EP/AW performance when used in combination with ZnDTPs.

ADVANTAGES:

- * Excellent rust and corrosion inhibitor
- * Good demulsibility
- * Excellent thermal and oxidative stability
- * Antioxidant synergism
- * Synergistic with ZnDTPs
- * Excellent solubility in highly paraffinic base stocks

(see reverse side)

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TEST RESULTS: Technical reports are available from King Industries and can be requested by contacting the offices shown below.

SOLUBILITY: Soluble in petroleum and synthetic lubricant base stocks and most common solvents. Insoluble in water. However, it is recommended to verify the solubility in the base oils used and the compatibility with other additives.

STANDARD PACKAGING: 440 lbs (200 kg) closed head drum.

STORAGE CONDITIONS: Store in a cool, dry place away from any direct source of heat and moisture. Maximum recommended storage temperature: 46°C (115°F)

SHELF LIFE: Best if used within 3 years from the date of manufacture.

HANDLING: Avoid all personal contact. Observe good personal hygiene. For additional information, it is advised to consult the Material Safety Data Sheet (MSDS) for **NA-SUL ZS-HT**.

REGISTRATION: Please refer to Section 15 of the Material Safety Data Sheet for information.

For Samples or Technical Service, contact King Industries or your King representative.

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