

Product Data Sheet

NA-SUL[®] SS



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NA-SUL SS is a rust and corrosion inhibitor that is designed to provide superior rust and corrosion protection in oil-based as well as water-based rust preventive fluids.

CHEMICAL

COMPOSITION: Sodium alkylnaphthalenesulfonate in a light mineral oil.

APPEARANCE: Clear brown viscous liquid.

TYPICAL

PROPERTIES:	Sodium Content	2.4%
	Viscosity @ 40°C (ASTM D 445, DIN 51 550)	2000 mm ² /s (cSt)
	Viscosity @ 100°C (ASTM D 445, DIN 51 550)	55 mm ² /s (cSt)
	Density @ 15.6°C (ASTM D 4052)	0.97 g/ml
	Weight Per Gallon @ 25°C	8.1 lbs
	Flash Point, COC (ASTM D 92, DIN 51 376)	165°C (329°F)

Note: The above analytical data are not specifications.

APPLICATIONS:	Rust Preventive Fluids (water and oil-based) Circulating Oils	<u>Typical Treat Levels</u>
		1.00% - 15.0% 0.05% - 1.0%

NA-SUL SS is a high molecular weight synthetic sodium sulfonate with a narrow molecular weight distribution. Unlike most sodium petroleum sulfonates, **NA-SUL SS** is not an emulsifier. **NA-SUL SS** is used in rust preventive fluids, slushing oils, preservative oils and circulating oils. It is also used in rust preventive fluids where staining due to metal-to-metal contact is a problem. Rust preventive formulations based on **NA-SUL SS** form protective films on metal parts which provide resistance to re-emulsification. **NA-SUL SS** is recommended for use in soluble metalworking fluids and coolants to improve rust inhibition where it is significantly superior to sodium petroleum sulfonates. **NA-SUL SS** effectively prevents corrosion caused by dissimilar metal contact.

ADVANTAGES:

- * **Forms a highly polar, hydrophobic film which is strongly bonded to metal surfaces**
- * **Does not emulsify or demulsify; therefore, it can be used as a rust preventive additive for emulsion type fluids without destabilizing the emulsion**
- * **Rust preventive films that contain NA-SUL SS resist re-emulsification from high humidity, thereby increasing metal protection**
- * **Solubility characteristics allow use in oil or water systems**

(see reverse side)

NA-SUL[®] SS

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. Slightly soluble 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 Safety Data Sheet (SDS) for **NA-SUL SS**.

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

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

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