

Product Data Sheet

NA-SUL[®] 437

SAMPLE REQUEST



Science Road
Norwalk, CT 06852
(800) 431-7900
Fax: (203) 866-0425
E-Mail: lad@kingindustries.com

NA-SUL 437 is a water soluble rust preventive concentrate ideally suited for the manufacturing of water-based rust preventive fluids. **NA-SUL 437** based products have excellent solubility, stability and tolerance for hard water.

CHEMICAL

COMPOSITION: Preparation of dinonylnaphthalenesulfonic acid, organic acid complex and an amine.

APPEARANCE: Clear amber liquid.

TYPICAL

PROPERTIES:	Viscosity @ 40°C (ASTM D 445, DIN 51 550)	300 mm ² /s (cSt)
	Density @ 25°C (ASTM D 4052)	0.99 g/ml
	Weight Per Gallon @ 25°C	8.3 lbs
	Flash Point, COC (ASTM D 92, DIN 51 376)	> 100°C (> 212°F)

Note: The above analytical data are not specifications.

APPLICATIONS: Water Soluble Rust Preventive Fluids

Typical Treat Levels

0.5% - 10%

NA-SUL 437 is a unique water soluble rust preventive concentrate. It can be cut back in either cold or warm water. **NA-SUL 437** also shows excellent hard water tolerance. It exhibits exceptional storage stability both as the concentrate and in water solutions. Unlike most water soluble rust preventive additives, **NA-SUL 437** deposits a thin film upon metal parts that becomes hydrophobic during drying. This enables parts to resist rusting for extended periods, even in the 100% humidity environment of the Humidity Cabinet (ASTM D 1748) test. The thin protective film can easily be removed with alkaline cleaners. Water solutions of **NA-SUL 437** are ideal for dip application of metal parts for protection during indoor storage. Wet parts may be dipped in **NA-SUL 437** solutions replacing the need for solvent based dewatering fluids.

To achieve foam control in **NA-SUL 437** solutions, it is recommended to use Foamban[®] MS-525 (Munzing, Inc. Bloomfield, NJ.). Add the antifoam at a concentration of *0.1% of the NA-SUL 437* concentration in the solution. A typical formulation based on 1000 g could be: 950 g water, 49.95 g **NA-SUL 437** and 0.05 g Foamban MS-525.

ADVANTAGES:

- * Deposits extremely thin hydrophobic films
- * Easily cut back in cold water
- * Thin film formation allows fast drying

(see reverse side)

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- * **Film is easily removed with alkaline cleaner**
- * **Solutions are very hard water tolerant**
- * **Product concentrate and dilutions have long term stability**
- * **Can be applied on wet parts without loss of effectiveness**

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

SOLUBILITY: Soluble in water at all concentrations. Soluble in alcohols and glycols.

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 2 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 437**.

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.

King Industries, Inc.
Science Road
Norwalk, CT 06852-0588
Tel: 203-866-5551
Fax: 203-866-0425
E-mail: LAD@kingindustries.com

King Industries International, Inc.
Science Park 402,
1098 XH Amsterdam
The Netherlands
Tel: +31-20-723-1970
E-mail: info@kingintl.nl

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