

NA-SUL[®] 1019A



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

NA-SUL 1019A is a water-soluble rust and corrosion inhibitor that provides excellent protection for steel, galvanized steel and aluminum.

CHEMICAL

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

APPEARANCE: Clear amber liquid.

TYPICAL

PROPERTIES:	Viscosity @ 40°C (ASTM D 445, DIN 51 550)	350 mm ² /s (cSt)
	Density @ 15.6°C (ASTM D 4052)	1.02 g/ml
	Weight Per Gallon @ 25°C	8.5 lbs
	Flash Point, CC (ASTM D 3828, ISO 15 23)	88°C (190°F)

Note: The above analytical data are not specifications.

APPLICATIONS: **NA-SUL 1019A** is a water-soluble rust and corrosion inhibitor concentrate for protecting steel and aluminum parts during storage. Solutions of **NA-SUL 1019A** are ideal for coating metal parts by dipping. Parts dry in about 15 minutes, leaving a thin, almost dry, hydrophobic film on the metal surface that provides excellent protection even in very humid conditions. The film can be easily removed with alkaline cleaners. Treat levels of 1.0%-10.0% are recommended depending on the applications and requirements.

ADVANTAGES:

- * **Water soluble**
- * **Fast drying**
- * **Thin, dry film**
- * **Excellent hard water tolerance**
- * **Film can be removed easily with alkaline-type cleaners**
- * **Water solutions maintain clarity**

(see next page)

BLENDING

INSTRUCTIONS: **NA-SUL 1019A** can be cut back with water to any desired concentration. It is soluble in warm or cold water. The concentrate has excellent storage stability. Dilutions maintain clarity and stability for extended periods of time, even in hard water.

To achieve foam control of the formulated water-based rust preventive fluid, it is recommended to use Foamban[®] MS-525 (Münzing Inc. Bloomfield, NJ.) Add the antifoam at a concentration of *0.1% of the NA-SUL 1019A* concentration in the solution. A typical formulation based on 1000 g could be: 900 g water, 99.9 g **NA-SUL 1019A** and 0.1 g Foamban MS-525.

SOLUBILITY: Soluble in water in all proportions. The solutions are clear.

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 1019A**.

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

NA-SUL[®] is a registered trademark of King Industries, Inc.

Foamban[®] is a registered trademark of Münzing Inc., Bloomfield, NJ, USA

v:\ad\Technical Literature\CumtTDS\NASUL\1019A_05
Revision date: 12 Jan 2016

The conditions of your use and application of our products, technical assistance and information (whether verbal, written or by way of product evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. Such testing has not necessarily been done by King Industries, Inc. ("King"). The facts, recommendations and suggestions herein stated are believed to be reliable; however, no guaranty or warranty of their accuracy is made. EXCEPT AS STATED, THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE. KING SHALL NOT BE HELD LIABLE FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES. Any statement inconsistent herewith is not authorized and shall not bind King. Nothing herein shall be construed as a recommendation to use any product(s) in conflict with patents covering any material or its use. No license is implied or granted under the claims of any patent. Sales or use of all products are pursuant to Standard Terms and Conditions stated in King sales documents.