

NIONIC™ 31R1 Surfactant

NIONIC™ 31R1 Surfactant is a reverse block copolymer surfactant with a chemical structure designed to provide reduced foaming and gelling tendencies compared to non-reverse block copolymer surfactants. NIONIC™ 31R1 Surfactant can be used to reduce the surface tension of liquids, including high viscosity liquids even at very low concentrations. The unique features are extremely low toxicity, defoaming activity, wetting, cleaning, emulsification, and chemical and thermal stability.

Typical Physical Properties

Actives (wt%)	100
Cloud Point, 1% aq (°C)	24
Contains EO	Yes
Pour Point (°C)	—
Appearance	Clear Liquid
Viscosity at 25 °C (cP)	600
Density at 25 °C (lb/gal)	8.51
CMC	—
Surface Tension ¹ (dynes/cm)	—
Ross-Miles Foam Height ² , mm	(14/1/1/1)
Draves Wetting ³ (sec)	40

The values above are not specifications

¹Surface Tension: 1% aq at 25°C

²ASTM D1173-07: mm at 0.1 wt% actives, 25°C, t = 0 / t = 1 min / t = 3 min / t = 5 min

³ASTM D2281-10, Evaluation of Wetting Agents by the Skein Test, 0.1% aq at 25°C

Benefits

- Foam Control
- Wetting Agent
- Thermal Stability
- Chemical Stability
- Good Steric Stabilization
- Rinsability

Applications

- Fermentation
- Metal Working Fluids
- Pulp and Paper Processing
- Dishwashing Detergent
- Rinse Aid
- Industrial / Institutional Cleaning

NIONIC™
SURFACTANTS

Formulate for the Future

Storage Information

NIONIC™ 31R1 Surfactant will absorb water if the product container is not secured properly. This may affect reactivity, appearance, and performance. Therefore, it is advised that all receptacles containing this material be tightly fastened and stored in a dry place.

Consult the Safety Data Sheet for additional information.

Health and Safety Information

Health and safety information is available in the form of a Safety Data Sheet. This literature, describing proper precautions and personal protective gear, is available for review. To receive this information please contact a Carpenter Co. representative.

Ordering and Shipping Options

Sample Sizes

1 quart

1 gallon

5 gallon

Products Packaged/Shipped

Drum 460 lb net wt.

Totebin 2,300 lb net wt.

Tankwagon 40,000-45,000 lb net wt.

Railcar 185,000-189,000 lb net wt.

For additional information please contact:

Carpenter Co.

Chemicals Division

Customer Service 800-260-5373

5016 Monument Avenue

Richmond VA 23230

www.carpenter.com



Manufacturing Facility



Updated June 2023

Important: The information contained in this product data sheet is offered for your consideration, investigation, and verification. The data is presented in good faith and is believed to be reliable. Carpenter, however, makes no representation as to the completeness or accuracy. Carpenter makes no warranty, express or implied, with respect to the data contained herein. Carpenter cannot anticipate all conditions under which this data and the product may be used. The conditions of handling, storage, use, and disposal of the product are beyond Carpenter's control. Thus we expressly disclaim responsibility or liability for any loss, damage, or expense arising out of reliance on the information contained herein. You are advised to make your own determination as to safety, suitability, and appropriate manner of handling, storage, use, and disposal. For further information please consult the appropriate Carpenter Safety Data Sheet. **Warning:** These products can be used to prepare a variety of polyurethane products. Polyurethanes are organic materials and must be considered combustible.

NIONIC™
SURFACTANTS

Formulate for the Future