



DOWFAX 63N10
Nonionic Surfactant

General Information

The Dow Chemical Company is a science and technology-based company and one of the world's largest producers of polyalkylene glycols. Our worldwide research, manufacturing, and distribution includes facilities in Europe, North America, Latin America, and Asia-Pacific. With over 30 years experience in polyglycol manufacturing, the industry's broadest product line, and a leadership position in new product development, Dow is uniquely positioned to meet the needs of a diverse global marketplace. This success results from expanding our customers' markets through combined customer formulation knowledge and Dow alkoxylation expertise in joint development applications. Together we focus these resources to help ensure success for our customers and their products.

DOWFAX Nonionic surfactants

DOWFAX* Nonionic Surfactants are high-performance products that feature excellent solvency, low foam characteristics, chemical stability, and a long list of other valuable performance properties. They are produced by polymerizing ethylene oxide (EO), propylene oxide (PO), and/or butylene oxide (BO) in the same molecule. The ratio and order of oxide addition, together with the choice of initiator, control the chemical and physical properties.

DOWFAX 63N10 Nonionic Surfactant is a linear copolymer. It is a slightly viscous liquid at room temperature with a low pour point. See Table 1 for Typical Properties of DOWFAX 63N10 Nonionic Surfactant.

Applications and Uses

DOWFAX 63N10 Nonionic Surfactant is an efficient foam control agent because of its low foam characteristics and inverse water solubility. The optimum operating temperature range for low foam characteristics is +/- 10°C of the surfactant's cloud point in that system. DOWFAX 63N10 Nonionic Surfactant is used in foam control processes such as fermentation of monosodium glutamate, lactic and citric acids and some alcohols, food processing, food washing, water treatment, and metalworking products like degreasing chemicals and cutting oils. It can be reacted with an organic acid to form an ester, which is also an effective foam control agent.

Due to its low surface tension, DOWFAX 63N10 Nonionic Surfactant makes a particularly efficient rinse aid and low foam wetting agent in autodish detergents, I&I cleaning, and in-place cleaning applications such as food, dairy, and brewery cleaning. Other applications for DOWFAX 63N10 Nonionic Surfactant include acid gas treatment, an emulsifier for oil/water formulations, and an industrial surfactant.

Technical Expertise When and Where You Need It

Dow experts on DOWFAX Nonionic Surfactants are regionally located to quickly respond to your needs. They are globally networked to take maximum advantage of years of combined experience. Whether your question involves products, applications, or regulations, Dow offers comprehensive customer and technical service.

DOWFAX Nonionic Surfactants

Your first choice

TABLE 1: Typical Properties of DOWFAX 63N10 Nonionic Surfactant

Property (Unit)	Typical Value	Test Method
Viscosity @ 25°C (cSt)	294	ASTM D 445 / D 446
Cloud Point, 1% Aqueous (°C)	23	ASTM D 2024
Cloud Point, 10% Aqueous (°C)	18	ASTM D 2024
Cloud Point, 10% Solvent ¹ (°C)	39	ASTM D 2024
Wetting time @ 25°C (sec)	214	DIN 53901
Wetting time @ 70°C (sec)	> 300	DIN 53901
Surface Tension ² (mN/m)	35.5	ASTM D 1331
Pour Point (°C)	-35	ASTM D 97
Specific Gravity (g/cm ³ @ 25°C/25°C)	1.015	ASTM D 892

¹ 10% surfactant in a solution of 25% diethylene glycol butyl ether in water

² Temperature 20°C, 1% surfactant in water

Notice: The information and data contained herein do not constitute sales specifications.

No liability, warranty or guarantee of final product performance is created by this document.

Safe Use and Handling

DOWFAX 63N10 Nonionic Surfactant is easy to store and handle. For specific safe use and handling information, or to obtain a DOWFAX 63N10 Nonionic Surfactant Material Safety Data Sheet, contact your local Dow representative or please visit us at www.dow.com. DOWFAX 63N10 Nonionic Surfactant has been shown to be readily biodegradable in the Manometric Respirometry test according to OECD Guideline 301 F.

Product Stewardship

Dow encourages its customers and potential users of DOWFAX 63N10 Nonionic Surfactant to review their applications from the standpoint of human health and environmental aspects. To help ensure that DOWFAX 63N10 Nonionic Surfactant is not used in ways for which it is not intended or tested, Dow personnel will assist customers in dealing with environmental and product safety considerations. Dow literature, including Safety Data Sheets, should be consulted prior to the use of DOWFAX 63N10 Nonionic Surfactant.

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