Product Information

SURFYNOL® SE-F

Non-Ionic Dynamic Wetting Agents and Molecular Defoamer

PRODUCT DESCRIPTION

SURFYNOL® SE F Surfactant is a self-emulsifiable, non-ionic wetting agent based on acetylenic diol chemistry. In addition to wetting, it also has antifoaming properties in many aqueous formu-lations. It forms stable emulsions in water at concentrations up to 75% by volume. This improves the ease of incorporation into aqueous systems. In most cases, brief mixing is all that is required to achieve a homogeneous formulation.

Typical Properties

Property	Unit	Value
Activity	%	80
Appearance		clear liquid
Boiling Point	°C	132
Flash Point above	°C	>110
Specific Gravity at 21°C	g/ml	0.89
Vapor Pressure 20°C	hPa	0.0066
Viscosity at 55°C	mPa·s	15-25

The data represents typical values (no product specification)

TYPICAL APPLICATIONS

Pressure-Sensitive Adhesives

The low surface energy of silicone and plastic film release liners requires strong wetting agents to achieve proper adhesive coverage. SURFYNOL® SE-F Surfactant's ability to provide excellent wetting under dynamic conditions ensures consistent adhesive quality while controlling or reducing foam problems. Once in the dried adhesive, SURFYNOL® SE-F Surfactant will not adversely affect the adhesive's water sensitivity.

Printing Inks

SURFYNOL® SE-F Surfactant is particularly useful in printing ink applications where FDA compliance is required, such as food packaging. The product has excellent properties such as nonfoaming wetting in water-based inks for either rapid penetration of absorbent substrates or coverage over nonporous films and foil. Since the product is based on acetylenic diols, water sensitivity is minimized as compared to conventional surfactants.

Metalworking

SURFYNOL® SE-F Surfactant can be used in waterbased lubricants to improve lubricity, heat transfer, wetting and cleaning, and suspension of metal fines. SURFYNOL® SE-F Surfactant can be used to enhance performance of synthetic can-making lubricants for aluminum and tin plate, and also in aluminum cutting fluids and rolling tubes. Other applications included functional fluids, wire drawing lubricants, and lubricants for forming operations on other metals. Additionally, SURFYNOL® SE-F Surfactant is chemically stable from pH2 to pH12 and resists oxidation and degradation over a wide range of use conditions.

Internal Can Coatings

When used in internal can coatings, SURFYNOL® SE-F Surfactant provides surface tension modification for substrate wetting with minimal foam.

Other Applications

The ability of SURFYNOL® SE-F Surfactant to provide excellent wetting without generating foam indicates that this product will improve the performance of many water-based systems, including industrial coatings, agricultural chemicals, textiles, pigment dispersions and general adhesives.

BENEFITS & ADVANTAGES

- SURFYNOL® SE-F Surfactant promotes substrate wetting by effectively lowering the surface tension of aqueous systems. This is demonstrated by the low equilibrium

and dynamic surface tension values of 0.1% solution in water

- In actual applications, SURFYNOL® SE-F Surfactant will quickly migrate to newly formed surfaces and provides excellent wetting of low-energy or contaminated substrates. And since this product is based on acetylenic dio chemistry, it is inherently a non-foaming wetting agent, and in some systems can perform as a defoamer

DOSAGE

Between 0.1 and 1.0% of total formulation weight is recommended.

HANDLING & PROCESSING

Handling depends on the application field.

SHELF LIFE

The shelf life for this product is 60 months from the date of manufacture.

Keep containers tightly closed in a dry, cool, and well-centilated place. Product is freeze-thaw stable; if it phase seperates or freezes at colder temperatures, warm container to 40 °C and mix thoroughly before use.

HAZARDOUS SUBSTANCE

Information concerning

- Classification and labelling according to regulations for transport and for dangerous substances
- Protective measures for storage and handling
- Measures in case of accidents and fire
- Toxicity and ecological effects

is given in our material safety data sheets.

REGISTRATION LISTING SUMMARY

The relevant components of SURFYNOL® SE-F are listed/ registered or exempt in the following chemical inventories:

Registration Listings	
Registry	**Status**
Australia (AIIC)	Yes
Canada (DSL)	Yes
China (IECSC)	Yes
Japan (ENCS)	Yes
South Korea (TCCL)	Yes
New Zealand (NZIoC)	Yes
Philippines (PICCS)	Yes
Taiwan (TCSI)	Yes
USA (TSCA)	Yes

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