

## Product Information

## SURFYNOL® 104 E

## Non-ionic Dynamic Wetting Agent and Molecular Defoamer

## PRODUCT DESCRIPTION

SURFYNOL® 104 E surfactant is a Gemini wetting agent and molecular defoamer formulated to provide a unique combination of performance benefits. Surfynol® 104E surfactant's unique chemical structure allows this product to provide multifunctional properties such as surface tension reduction, foam control, and viscosity stabilization. The hydrophobic nature of SURFYNOL® 104 E surfactant can result in significantly reduced water sensitivity compared to either conventional ethoxylated or anionic surfactants.

Due to its multifunctional properties, SURFYNOL® 104 E surfactant can provide performance benefits in many waterborne applications such as coatings, paints, adhesives, inks, pigment manufacture and dispersion, cements, metalworking lubricants, agricultural chemicals, and dye processing. SURFYNOL® 104 E surfactant contains no added alkylphenol ethoxylates (APEs), silicones or fluorosurfactants.

## Typical Properties

Property	Unit	Value
Activity	%	50
Appearance		Clear, pale yellow liquid
Flash Point	°C	≤111
Pour Point	°C	-17
Specific Gravity at 21°C	g/ml	1.0
Viscosity at 20°C	mPa·s	100

The data represents typical values (no product specification)

## TYPICAL APPLICATIONS

- Adhesives
- Automotive coatings
- Factory-applied and DIY wood coatings
- Industrial maintenance coatings
- Printing inks
- Overprint varnishes
- Fountain solutions
- Pressure sensitive adhesives
- Pigment synthesis and grinding/dispersing
- Dye processing
- Agricultural chemicals
- Metalworking fluids

## BENEFITS &amp; ADVANTAGES

- Low dynamic surface tension
- Ability to wet contaminated substrates Non-micelle forming
- Stability between pH 3-10
- Prevents surface defect problems such as fisheyes, crawling, and cratering on lowenergy substrates
- Reduces microfoam in spray-applied systems Improves pigment grind efficiency
- Reduces water sensitivity
- Defoams, de-airetrains, and improves flow
- Enhances leaf and soil penetration while improving bloom and stability in agricultural chemical formulations
- Lubricates, wets, and prevents smut formation while eliminating hot spots in metalworking fluids

## DOSAGE

Between 0.10 and 1.5% of total formulation weight is recommended.

## HANDLING & PROCESSING

For questions concerning handling, please refer to the safety data sheet.

The product can be added as delivered to the desired application.

## STORAGE

Surfynol® 104 E surfactant should be stored under dry and clean conditions between -10°C and 50°C. Product is freeze-thaw stable; if it phase separates or freezes at colder temperatures, warm container to 40°C and mix thoroughly before use. Please refer to Material Safety Data Sheet.

## SHELF LIFE

60 months from the date of manufacture.

The shelf life period can be subject to prolongations based on reapprovals in accordance with the established Evonik ISO 9001 quality management process.

## 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.

### Disclaimer

This information and all further technical advice are based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third-party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

### Evonik Operations GmbH

Interface & Polyurethane Additives  
Goldschmidtstraße 100  
45127 Essen  
Germany