

## Technical Information

# SURFYNOL® 104PG50 Surfactant

## Nonionic Dynamic Wetting Agent and Molecular Defoamer

### Description

Surfynol® 104PG50 surfactant is a Gemini wetting agent and molecular defoamer formulated to provide a unique combination of performance benefits. Surfynol® 104PG50 surfactant's unique chemical structure enables this product to provide multifunctional properties such as surface tension reduction, foam control, and viscosity stabilization. The hydrophobic nature of Surfynol® 104PG50 surfactant can result in significantly reduced water sensitivity compared to either conventional ethoxylated or anionic surfactants.

Due to its multifunctional properties, Surfynol® 104PG50 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® 104PG50 surfactant contains no added alkylphenol ethoxylates (APEs), silicones or fluorosurfactants.

### Recommended Usage

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

### 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 low-energy substrates
- Reduces microfoam in spray-applied systems
- Improves pigment grind efficiency
- Reduces water sensitivity
- Defoams, de-aerates, 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

### Typical properties

|                           |                           |
|---------------------------|---------------------------|
| Appearance                | Clear, pale yellow liquid |
| Activity                  | 50%                       |
| Solvent                   | Propylene glycol          |
| Specific Gravity at 21 °C | 0.96                      |
| Viscosity at 20 °C        | 200 mPa.s                 |
| Flash Point               | >93 °C                    |
| Pour Point                | -11 °C                    |

These are typical properties only and do not represent sales or manufacturing specifications.

### Applications

- 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

### Storage and Handling

Surfynol® 104PG50 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 60 °C and mix thoroughly before use. Please refer to Material Safety Data Sheet.

## Shelf-Life

60 months from the date of manufacture.

## Hazardous goods classification

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.

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## For Technical Information, Support and Samples:

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