

# BELSIL® P 1101



## Silicone Fluids, functional (INCI)

BELSIL® P 1101 is a silicone-organic hybrid polymer designed for use in conditioning leave-in and styling formulations in hair care. It is also suitable for use in color cosmetics, such as nail polish. BELSIL® P 1101 is supplied as a 50% solution in denatured ethanol.

**INCI Alcohol , Crotonic Acid/Vinyl C8-12 Isoalkyl Esters/VA/Bis-Vinyldimethicone Crosspolymer**



## Properties

BELSIL® P 1101 is a silicone-organic hybrid polymer based on polyvinyl acetate and silicone building blocks. It combines the strong film-forming, hold, and adhesion properties of polyvinyl acetate with the softness, silkiness, and lubricity characteristic of silicones. This unique property profile enables its use in a wide range of hair care formulations, including aerosols, pump sprays, balms, gels, and pastes.

In styling applications, BELSIL® P 1101 acts as a non-flaking hair resin that provides medium to strong hold and defines curls, while imparting a silky hair feel. The polymer allows for high water content formulations without compromising hold, sensory properties, or drying time, and demonstrates good compatibility with standard aerosol propellants such as DME and butane/propane blends.

In conditioning leave-in applications such as hair balms, curl treatments, heat protection sprays and styling pastes, BELSIL® P 1101 imparts a unique, silky hair feel that enhances sensory appeal, reduces frizz, can help protect hair from heat damage and can enhance shine.

## Technical data

### General Characteristics

Property	Condition	Value	Method
Solid content	-	approx. 50 %	-
Acid number / saponification number	-	28 - 33 mg KOH/g	-
Product form	-	Ethanol solution	-

These figures are only intended as a guide and should not be used in preparing specifications.

All the information provided is in accordance with the present state of our knowledge. Nonetheless, we disclaim any warranty or liability whatsoever and reserve the right, at any time, to effect technical alterations. The information provided, as well as the product's fitness for an intended application, should be checked by the buyer in preliminary trials. Contractual terms and conditions always take precedence. This disclaimer of warranty and liability also applies particularly in foreign countries with respect to third parties' rights.

## Applications

- Conditioners
- Hair Care
- Hair Styling
- Nail Polish

## Application details

BELSIL® P 1101 is supplied in denatured ethanol as the solvent. The solution needs to be stirred well before use. The hybrid polymer contains free acid groups which should be neutralized when using BELSIL® P 1101 in aqueous formulations to ensure the hybrid polymer remains solubilized in water. This can be achieved by adding a suitable base. The acid number is provided with the certificate of analysis. The amount of base depends on the desired degree of neutralization, which typically ranges between 80–100%. Our "Neutralization Calculator" can assist you in determining the correct dosage

When formulation styling products, BELSIL® P 1101 can be blended with other hair styling resins. For such cases the polymers should be neutralized separately before being combined in the final formulation.

For anhydrous formulations, no neutralization is necessary.

## Packaging and storage

### Storage

The 'Best use before end' date of each batch is shown on the product label. Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, the properties required for the intended use must be checked for quality assurance reasons.

## Safety notes

Comprehensive instructions are given in the corresponding Material Safety Data Sheets. They are available on request from WACKER subsidiaries or may be printed via WACKER web site <http://www.wacker.com>.

## QR Code BELSIL® P 1101



**For technical, quality or product safety questions, please contact:**

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