

## Benzoate Ester

### Finsolv® SLB-101 and SLB-201

INCI Names: Dimethicone PEG/PGG-20/23 Benzoate and Dimethicone PEG-8 Benzoate

CAS Nos.: 337966-38-8 and 337966-41-3

EINECS NO.: Exempt Polymer

Finsolv® SLB 101 and Finsolv® SLB 201 are hydrophilic benzoate esters that leave a silicone-like feel on skin.

The backbone of Finsolv® SLB-101 and Finsolv® SLB-201 are Dimethicone Copolymers.

Finsolv® SLB-101 and Finsolv® SLB-201, based on selected but differing range of molecular weights of varying ratios of EO/PO (Ethylene Oxide/Propylene Oxide ratio), are highly hydrophilic and are designed to be used in aqueous systems where clarity and/or high degree of emollient solubility is desirable.

#### Applications

Finsolv® SLB-101 and Finsolv® SLB-201 both having highly hydrophilic character, are applicable in aqueous systems. They are useful in all types of skin, hair and decorative products. Hand and face creams benefit from their unique feel on the skin and spreading properties. Bath and shower products including shaving products will have improved lubricity and after-feel due to the silicone backbone. Colour cosmetics will spread easier and have better wetting and leveling effects in the dispersion of pigments. Use of these esters at a very small level (0.1-0.5%) in bar soaps or syndet bar soaps imparts excellent skin feel without the soap feel.

Finsolv® SLB-101 and Finsolv® SLB-201 are also useful in treatments of fibres, textiles and non-woven substrates such as tissues and wipes lending a smooth hydrophilic finish in skin cleansing applications.

#### Solubilities (1 gm. product in 10 gm. solvent) of Finsolv® SLB in:

	Finsolv® SLB-101	Finsolv® SLB-201
Water	Soluble	Soluble
Ethanol	Soluble	Soluble
Glycerine	Insoluble	Insoluble
Glycerine + Water(1:1)	Soluble	Soluble
Propylene Glycol	Insoluble	Soluble
Propylene Glycol + water (1:1)	Soluble	Soluble
Volatile Silicones	Insoluble	Insoluble
Mineral Oil	Insoluble	Insoluble
Finsolv TN	Soluble	Insoluble
Finsolv EMG-20 + Water (1:1)	Soluble	Soluble



#### TYPICAL PROPERTIES

Not intended for use in preparing specifications

	Finsolv® SLB-101	Finsolv® SLB-201
Appearance	Clear to slightly hazy liquid	Clear slightly hazy liquid
Odour	Mild	Mild
Saponification value, mg KOH/g	3-6	12-18
Moisture, %	0.50 maximum	1.0 maximum
Colour, Gardner	3 maximum	2 maximum

## Suggested Formulas

### Sulfate-Free Body Wash AC053

This sulfate-free body wash has a dense luxurious lather and a silky smooth after-feel.

	INCI Ingredients	Tradename (Supplier)	% w/w
A	Water		q.s to 100
	Trisodium Ethylenediamine disuccinate	Natrlquest E30 (Innospec)	0.10
	Glycerin		3.00
	Sodium Methyl Cocoyl Taurate	Pureact WS Conc. (Innospec)	15.00
	Sodium Cocoyl Isethionate	Pureact I-78C (Innospec)	1.50
	Cocamidopropyl Betaine	Mirataine BET C-30 (Rhodia)	12.00
	Dimethicone PEG-8 Benzoate	Finsolv SLB-201 (Innospec)	0.80
	Methyl Gluceth-20 Benzoate	Finsolv EMG-20 (Innospec)	0.50
	PEG-150 Pentaerythrityl Tetrastearate	Crothix (Croda)	2.00
C	Preservative		q.s.
D	Citric Acid (50% soln)		q.s. to pH 5.5-6.0

#### Preparation Procedure

1. Dissolve Natrlquest E30 and glycerin in water.
2. Begin heating to 50-60 °C and with smooth mechanical agitation, slowly blend each ingredient of Phase B, one at a time, into water and mix until completely dispersed.
3. Cool system to 30-35°C, add Preservative and mix until uniform.
4. Adjust pH to 5.5-6.0 with citric acid solution as needed.

#### Properties

Appearance	Clear gel
pH	5.5 - 6.0
Viscosity, cps	7,000-10,000
Stability	Passed 1 month at 45°C, 3 cycles freeze/thaw

\* Brookfield DV-E@10 rpm, 25 °C, #3 spindle

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