PARSOL® SLX is a silicone based UVB absorber. It is a colorless to pale yellow viscous liquid which is soluble in organic solvents of medium polarity and insoluble in water. PARSOL® SLX is the first polymeric UVB filter consisting of chromophores attached to a silicone backbone. It is an effective photostabilizer for PARSOL® 1789. PARSOL® SLX in combination with PARSOL® HS shows a very good synergy to achieve high SPF (>30).

Product name: PARSOL® SLX
INCI name: Polysilicone-15
USAN: 0486051 (ex U.S.), 5010438 (ex Germany)
Product code: 0486051 (ex U.S.), 5010438 (ex Germany)
Chemical name:
α-(trimethylsilyl)-ω-(trimethylsilyloxy)poly[oxy(dimethyl)silylene]-co-[oxy(methyl)(2-{p-[2,2-bis(ethoxycarbonyl)vinyl]phenoxy}-1-methyleneethyl)silylene]-co-[oxy(methyl)(2-{p-[2,2-bis(ethoxycarbonyl)vinyl]phenoxy}prop-1-enyl)silylene]

Chemical structure:

Absorption spectrum
E 1/1 in Ethanol:

Chemical formula: _
Molecular weight: Mw > 6000
CAS: 207574-74-1
EINECS: 426-000-4

Specifications
Purity:
Appearance: Colorless to pale yellow, slightly viscous liquid
E1/1: 160 – 190
Lambda max: 312 nm
Physical and chemical properties

Solubility:
Miscible with all relevant cosmetic oils, soluble in most organic solvents of medium polarity insoluble in water

- Isopropyl Palmitate > 50%
- Isopropyl Myristate > 50%
- Caprylic/Capric Triglyceride > 50%
- Cyclomethicone > 50%
- C12-C15 Alkyl Benzoate > 50%
- Ethylhexyl Palmitate > 50%
- Propylene Glycol dicaprylate/Dicaprate > 50%
- Isostearyl Neopentanoate > 50%
- Squalane < 25%
- Dimethicone < 1%

Known incompatibilities:
No known incompatibilities

Recommended use level:
1–5%

Regulatory status max concentration:
ASEAN 10%, Australia 10%, China no limit, Europe 10%, Japan 10%

Application information:
Formulations containing PARSOL® SLX should be always checked by in vivo methods regarding SPF efficacy. Due to its polymeric nature, in vitro SPF measurements underestimate the performance of PARSOL® SLX. Please talk to DSM application experts to benefit from our huge in vivo experience with PARSOL® SLX.