

# SILICONE ELASTOMER BLEND



## Product Bulletin

### TCE-3046

#### INCI Name

Cyclopentasiloxane & Dimethicone Crosspolymer

#### Description

TCE-3046 silicone elastomer blend is a mixture of high molecular weight silicone elastomers (dimethicone crosspolymer) in cyclopentasiloxane. TCE-3046 can be used in skin care, hair care, make-up, sunscreen, antiperspirants and deodorants, etc. It is easy to formulate and can be applied in cold process, It can reduce tackiness of formulations and provide dry, smooth and silky skin feel.

#### Specification

Parameter	Value
Appearance	Colorless translucent thixotropic solid
Penetration (25°C, mm)	8.00-12.00
Specific gravity	0.950-0.970
Non-volatile content (%)	13.00-15.00
D4 content (%)	<1.00

\* These values indicate typical specifications, they are not intended to be used as product specifications.

#### Properties

- Non-greasy
- Quick absorption
- Compatible with varieties of lipophilic active ingredients such as fragrances, sunscreens, vitamins, and vitamin derivatives
- Reduce tackiness of formulations, provide dry smooth and silky skin feel
- Easy to formulate and can be cold processing
- Stable and safe

#### Application

- Skin care products
- Sunscreen products
- Hair care products
- Make-up
- Antiperspirants, deodorants

#### Formula guidelines

Typically used at a level of 1-95%.

TCE-3046 can be added to the oil-phase or silicone phase in an emulsion formulation. It can be post-added to emulsions if the emulsion is viscous enough for TCE-3046 to be dispersed. For ease of use, its viscosity can be reduced by blending with dimethicone or cyclomethicone. When heat is used, the material should be processed in an enclosed vessel to prevent the cyclopentasiloxane from volatilizing, the temperatures of the vessel should not be over 85°C.

#### Storage & Handling

Use with adequate ventilation. Avoid eye contact. Do not take internally. Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking or smoking.

#### Storage

Static electricity will accumulate and may ignite vapors. Prevent a possible fire hazard by bonding and grounding or inert gas purge. Keep container closed and away from heat, sparks, and flame.

**Standard Packing:** 18 kg/drum, 180 kg/drum

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