



## Fact Sheet

### Polysorbate 80

**Description:** Derived from vegetable oil, Polysorbate 80 is a non-ionic surfactant and emulsifier used in foods and cosmetics, but primarily used to aid the mixing of oil and water. Soluble in water & alcohols, insoluble in oils. Amber, viscous liquid, but liquidity varies with temperature. Purity > 99%.

**INCI name:** Polysorbate 80

**CAS number:** 9005-65-6

**HLB Value:** HLB value 15 (gives oil-in-water emulsions).

**Use:** 1-10%, add to the formulation as is. Suitable for body scrubs, body creams, lotions, room spray, bath oils, bath bombs, shampoos, body washes, hair loss treatments

**Vegan:** Does not include animal derived ingredients

#### Why use Polysorbate 80?

- Multi-purpose, non-ionic emulsifier
- Used as a dispersing agent for fragrances and essential oils for room sprays and linen sprays.
- Assists with whipping and foaming body creams. (usage 1-5%)
- As a substitute for oils or witch hazel in bath bombs to help retain fizz (between 1-6% usage)
- Prevent bathtub staining when using dyes or micas (usage 1-2% or 1 part P80 to 2 parts oil/butter)
- Can be used as a hair re-growth stimulant

See sample formulation here: [Sparkling Body Scrub](#)