

Commercial Name	Vitamin C Tetra E
INCI name	Ascorbyl tetraisopalmitate

## Specifications

- **Function** : free scavenging properties, anti-aging effects, whitening
- **Alternative INCI**: Tetrahexyldecyl ascorbate
- **Purity (HPLC LC/UV) at 220 nm**: >96%
- **Country of Manufacturing**: France
- **Available forms**: liquid
- **Incorporation rate**: 1-3 %
- **Origin**: Natural ( index Iso 16128 = 0,91)
- **Color**: light yellow
- **Odor**: characteristic
- **Solubility**: oil soluble
- **China compliant**: yes
- **Vegan compliant**: yes
- Quasi-drug statute in Japan at 3%
- Whitening statute in Korea at 2%

## Tolerance

- **TOXICOLOGY**: Full Safety Assessment of Ethers and Esters of Ascorbic Acid as Used in Cosmetics 2016, available on request. Here below some results:
  - Genotoxicity: non-genotoxic
  - Skin Irritation: non-irritant
  - Sensitization: non skin sensitizer

- Keep container tightly closed ( avoid UV exposure) in dry and well-ventilated place. Add Nitrogen to avoid any degradation after opening
- Shelf Life: 24 months

## Formulation

### Vitamin Rich CREAM

Preservatives	QS	/
Water	QSP	Aqua
Frametime CXG (EPHYLA)	5	Bentonite & Xanthan gum & Sodium stearyl glutamate & Citric acid
Xanthan Gum FF	0,4	Xanthan gum
Regeneryl (EPHYLA)	1	Montmorillonite & Borojoa patinoi fruit juice & Ulva lactuca extract
Hyaluronic Acid HMW (EPHYLA)	0,1	Sodium hyaluronate
Vitamin D3-like (EPHYLA)	1	Aqua & Sodium citrate & Saccharomyces/Grape ferment extract & Sodium benzoate
Glycerin	2	Glycerin
Propanediol	5	Propanediol
Carnouba Wax	1,5	Copernicia Cerifera (carnauba) wax
Kokum Butter (EPHYLA)	10	Garcinia indica seed butter
Cetearyl alcohol	5	cetearyl alcohol
Vitamin C Tetra E (EPHYLA)	1	Tetrahexyldecyl ascorbate
Neossance squalane	10	Squalane
Perfume	QS	Parfum
HTR1 (EPHYLA)	3	Helianthus annuus seed oil & Protium heptaphyllum resin

### Protocol

- 1- Solubilize preservatives in water and heat at 40°C
- 2- Combine B to A and mix until completely homogeneous
- 3- Add C and mix
- 4- Heat D1 to 70°C and homogenize
- 5- Add D2 to D1 and homogenize
- 6- Add D to A&B&C and homomix until completely homogeneous