

SolarRed™ Natural Lycopene

Vita-Solar Biotechnology manufactures and markets a line of natural Lycopene under the brand name SolarRed™. Our products are derived from all-natural plant sources and are formulated for use in food, beverages, and dietary supplements.

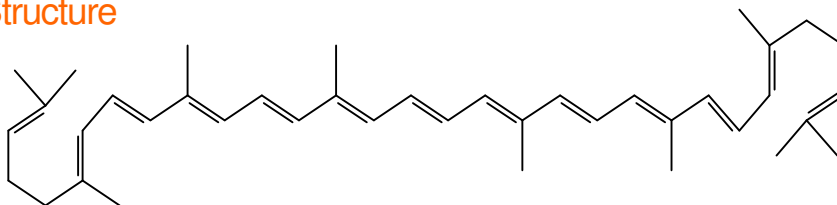
Product Description

Lycopene is a member of the carotenoid family of chemical substances. Lycopene, similar to other carotenoids, is a natural fat-soluble pigment (red, in the case of lycopene) found in certain plants and microorganisms, where it serves as an accessory light-gathering pigment and to protect these organisms against the toxic effects of oxygen and light. Lycopene may also protect humans against certain disorders, such as prostate cancer and perhaps some other cancers, and coronary heart disease.

Carotenoids are the principal pigments responsible for the colors of vegetables and fruits (see Beta-Carotene and Lutein and Zeaxanthin). Lycopene is responsible for the red color of red tomatoes. In addition to tomatoes (*Lycopersicon esculentum*) and tomato-based products, such as ketchup, pizza sauce, tomato juice and tomato paste, lycopene is also found in watermelon, papaya, pink grapefruit and pink guava. Processed tomato products are more available dietary sources of lycopene than fresh tomatoes. The average daily intake of lycopene is approximately 25 milligrams, with 50% of this in the form of processed tomato products.

Lycopene is an acyclic isomer of beta-carotene. Beta-carotene, which contains beta-ionone rings at each end of the molecule, is formed in plants, including tomatoes, via the action of the enzyme lycopene beta-cyclase. Lycopene is a 40 carbon atom, open chain polyisoprenoid with 11 conjugated double bonds

Chemical Structure



Chemical Formula : C₄₀H₅₆ Molecular Weight : 536.9

CAS Number: 502-65-8

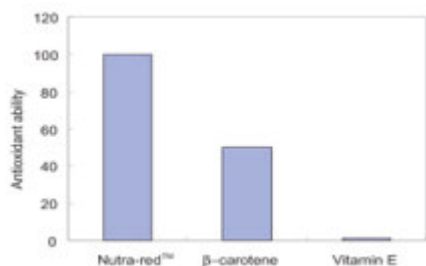
SolarRed™ Lycopene for your health

SolarRed™ is valued as a functional food ingredient because it is one of the carotenoid with powerful character of anti-oxidation. SolarRed™ also helps prevent prostate and other cancers, heart disease, and it may protect skin from sunlight damage.

Where nature meets science- Good water solubility

SolarRed™ technology provides excellent lycopene soluble in water for healthy food and cosmetic additive

Lycopene shows the strongest antioxidant activity



Applications

Medicine material

Function as anticancer product and prevent aging Prevent aging

Healthy food and cosmetic additives

Act as antioxidant

Act as natural color

Function in carotenoid composite product

Protect skin from sun damage

How does SolarRed™ reduce risk of Cancer?

Oxidative stress is recognized as one of the major contributors of increased risk of cancer, and in chemi- cal assays, SolarRed™ is the most potent antioxidant among various common carotenoids. SolarRed™ can trap singlet oxygen, quench free radical and reduce mutagenesis in the Ames test

Different SolarRed™ product forms

Product Code and Name	Application	Benefits
Lycopene Beadlet CWD	completely disperable in water	Dispersible in water
Lycopene Beadlet DC	Used to make tablets or pills.	Good flow characteristics Good compressibility
Lycopene Oil Suspension	A dark red liquid used in oil applications	Dispersible in oil

Usage

The recommended daily allowance of lycopene is 5 to 10 mg.

Storage

When stored in a cool dry place in the unopened original container, shelf life is 36 months after the date of manufacture. It should be protected from light, heat, oxygen and moisture. Store at cool temperature and in dry places. Use promptly after the original container has been opened.