



KALPASTHANA LIFE CARE PRODUCTS PVT. LTD.

Regd. Office: Plot No. 92P & 93, KIADB Industrial Area, Humnabad, Bidar District, Karnataka - 585330, India.

Email: info@kalpasthanalifecareproducts.com | Website: www.kalpasthanalifecareproducts.com

TECHNICAL DATA SHEET

Alpha Lipoic Acid

CAS No: 1077-28-7

PRODUCT DESCRIPTION

A high-purity active pharmaceutical ingredient and antioxidant (commonly known as Thioctic Acid or Alpha Lipoic Acid) widely used in dietary supplements, diabetic neuropathy therapies, and health formulations. Alpha Lipoic Acid acts as a universal antioxidant soluble in both water and fat. Commercially, its multi-step synthetic pathway utilizes high-purity intermediates including Methyl Adipoyl Chloride to construct its essential eight-carbon backbone. Kalpasthana Life Care Products manufactures premium grade Alpha Lipoic Acid under strict GMP quality compliance.

SPECIFICATIONS

Product Name	Alpha Lipoic Acid
Synonyms / Alternate Names	Thioctic acid, 1,2-Dithiolane-3-pentanoic acid, DL-Thioctic acid, DL-alpha-Lipoic acid, Thioctic acid racemic, 6,8-Thioctic acid
CAS Number	1077-28-7
Molecular Formula	C ₈ H ₁₄ O ₂ S ₂
Molecular Weight	206.33 g/mol
Appearance	Light yellow crystalline powder
Purity (HPLC)	≥ 99.0%
Melting Point	60–62 °C

APPLICATIONS & USAGE

Alpha Lipoic Acid (Thioctic Acid) is a premier universal antioxidant and organosulfur compound. It plays a critical role in cellular energy metabolism as a cofactor for mitochondrial multi-enzyme complexes. It is widely formulated in dietary supplements, therapeutic agents for diabetic neuropathy, anti-aging cosmetics, heavy-metal chelators, and neurodegenerative disease treatments.

- Universal Antioxidant Profile: Soluble in both water and fat, allowing it to neutralize free radicals throughout the entire cell structure.
- Neuropathy & Metabolic Support: Clinically proven to improve insulin sensitivity and alleviate symptoms of peripheral diabetic neuropathy.
- Dermatological & Anti-Aging: Widely used in topical formulations to prevent photo-aging, reduce skin inflammation, and support collagen structure.

DISCLAIMER & SAFETY

Disclaimer: The information contained in this Technical Data Sheet is accurate to the best of our knowledge. It is provided for informational purposes only. The user assumes all risk and liability for the product's use in manufacturing or commercial applications. Products are intended for industrial manufacturing and laboratory research purposes only. Please refer to the Material Safety Data Sheet (MSDS) for detailed safety, handling, storage, and disposal guidelines.

Plant Address: Plot No. 105, Part A, KIADB Industrial Area, Gadvanthi Village, Humnabad, Bidar District, Karnataka - 585330, India.

Phone: +91 7019420005