Unilong Industry Co., Ltd
Add: Shuntai, No.2000 Shunhua Rd, High-Tech Zone , Jinan City, Shandong Province, China

TECHNICAL DATA SHEET

Name	L-IMONENE
CAS	5989-54-8
Molecular formula	C10H16
Molecular weight	136.23
EINECS	227-815-6

SPECIFICATION :

Item	Standard
Appearance	Colorless or pale yellowish clear liquid
Relative Density	0.711-0.998
Refractive Index	1.4120—1.5920
Solubility	Dissolve in ethanol, slightly in glycerinum, insoluble in water and propylene glycol.
Content	≥91%

Application

1.Anti-corrosion and preservation: L-LIMONENE has the function of anti-corrosion and preservation, and has a significant inhibitory effect on common spoilage bacteria that cause meat spoilage, such as Staphylococcus aureus, Aspergillus niger, Escherichia coli, etc. In the food industry, by emulsifying DL-limonene and adding it to orange juice, the preservation effect of food can be significantly improved and the spoilage of food can be reduced.

2.Anti-bacterial property: L-LIMONENE is a safe and non-toxic anti-bacterial substance that can accumulate on the surface of microorganisms, causing a large reduction in the content of unsaturated fatty acids in the membrane, changing the composition of the membrane or destroying its integrity, thereby achieving an anti-bacterial effect. DL-limonene in grapefruit peel essential oil has a significant inhibitory effect on bacteria, fungi and molds.

3.Anti-oxidation: L-LIMONENE has good antioxidant properties, can scavenge free radicals, prevent oxidative damage, and thus prevent the occurrence of cancer to a certain extent. Essential oil extracts rich in DL-limonene can bleach β-carotene, show good antioxidant capacity, DPPH free radical scavenging ability, and provide antioxidants for the human body.

4.Industrial cleaning: L-LIMONENE can replace traditional chemical solvents in industrial cleaning and has the effect of degreasing and cleaning. It can be prepared into a cleaning agent with surfactants and additives for cleaning ink on printing presses. Compared with gasoline cleaning agents, the dosage is reduced by about 20%, the number of cleaning times is reduced by about 1/4~1/3, and the cleaning effect is better.

5.Synthetic flavors and food additives: L-LIMONENE is one of the important synthetic flavor varieties and is widely used in the food industry. For example, limonene derivative flavors and fragrances can be used in baked foods such as biscuits, bread, and cakes, as well as candy, jelly, etc. In fruit juice drinks, DL-limonene is used to enhance flavor and improve flavor and taste.