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Succinic Acid

Overview

TCC's **Succinic Acid** is a dicarboxylic acid comprised of four carbon atoms.

This four carbon dicarboxylic acid has uses in a number of industries including polymers (clothing fibres), food, surfactants and detergents, flavours and fragrances and as a starting material for any number of chemicals including adipic acid, N-methyl pyrrolidinone, 2-pyrrolidinone, succinate salts, 1,4-butanediol, maleic anhydride, tetrahydrofuran and gamma-butyrolactone, which are used in the pharmaceutical industry. **Succinic Acid** has many uses in the pharma industry - too many to mention, but some examples are as a starting material for active pharmaceutical ingredients (APIs), as an additive in formulation, **Succinic Acid** monoethyl ester has been used as an insulinotropic agent, and the compound has also been used as a cross linker in drug control release polymers.

The estimated 2010 worldwide use of **Succinic Acid** is around 20,000 to 30,000 tonnes per year and this is on the increase by around 10 per cent a year. It occurs naturally in plant and animal tissues. The chemical plays a significant role in intermediary metabolism (Krebs cycle) in the body. The Krebs cycle (also known as citric acid cycle) is a sequence process of enzymatic reaction in which a two-carbon acetyl unit is oxidized to carbon dioxide and water to provide energy in the form of high-energy phosphate bonds.

Succinic Acid is a colorless crystalline solid with a melting point of 185-187° C. It is soluble in water, slightly dissolves in ethanol, ether, acetone and glycerine. It does not dissolve in benzene, carbon sulfide, carbon tetrachloride or oil ether.

Carboxylic acids can yield acyl halides, anhydrides, esters, amides, and nitriles for applications in the drug, agriculture, food products, and other industries.