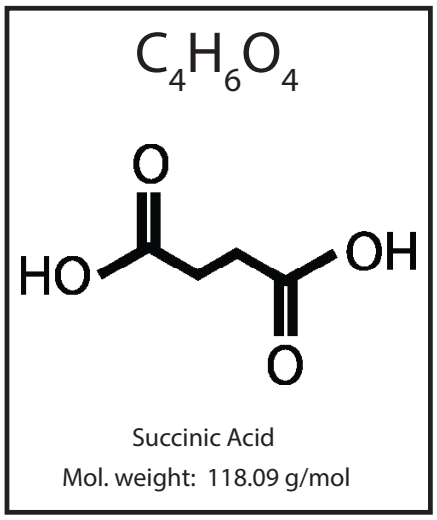
GC Innovation Bio-Succinic Acid



Succinic Acid
Mol. weight: 118.09 g/mol

APPLICATIONS:
Chemical building block

SYNONYMS:	
Abbreviations	SA/SAC
CAS Description	1, 4-Butanedioic acid
CAS No.:	[110-15-6]
EINECS-No.:	203-740-4
TSCA:	listed

Target Specifications	Value
Assay	99.5 wt%
Moisture	<0.5 wt%
Unsaturated compounds	<0.5 wt%
Ash	<0.5 wt%
Sulfate	<0.5 wt%
Phosphate	<10 ppm
Chlorine	<10 ppm
Iron	<10 ppm
Arsenic	<2 ppm
Lead	<2 ppm
Appearance	white crystalline
Packaging	25 kg poly bags 1000 kg Super sack

OTHER PROPERTIES:	
Boiling point:	235 °C
Flash point:	206 °C
Ignition temperature	470 °C
Density at 20 °C:	1.56 g/cm^3
Solubility in / Miscibility with water at 20 °C:	58 g/l

Succinic acid, also known as amber acid and 1,4-butanedioic acid, is produced naturally as a product of cellular metabolism, and is currently produced synthetically from petroleum derivative maleic anhydride. This versatile 4-carbon dicarboxylic acid has many uses—from food packaging and pharmaceutical products, to detergents and plastics. In addition to the traditional uses of succinic acid, it can also replace other building block chemicals such as adipic acid and phthalic anhydride.

Bio-succinic acid is a greener, more environmentally friendly version of its petroleum-derived counterpart. Made from renewable, sustainable resources, GC's bio-succinic acid is identical in structure to succinic acid made from petroleum. With consumers desiring to live more sustainably and demanding greener product choices, GC's biobased succinic acid is a smart choice for manufacturers trying to reduce the environmental footprint of their products.

Target Applications:

PBS: Succinic acid is one of the two primary intermediates used to manufacture PBS, and is a building block chemical in the production of 1,4-butanediol (BDO). GC's bio-succinic acid is a true drop-in replacement for petroleum-based succinic acid, enabling manufacturers to produce a truly bio-based, biodegradable polymer.

Plasticizers: Phthalates, a common ingredient in everything from shower curtains and floor tiles to PVC pipes and toys, have come under increasing scrutiny and regulation in recent years. GC's bio-succinic acid can be formulated to replace phthalates as plasticizers in a variety of plastic applications. Our chemistry enables manufacturers to replace phthalates while maintaining performance.

Polyester Polyols: GC's bio-succinic acid can replace the adipic acid commonly used in making polyester polyols. The chemical structure of GC's bio-succinic acid is comparable to adipic acid, enabling integration with existing formulations and processes. It can provide similar performance in your process, as well as your customers' final product, while reducing your environmental footprint and freeing you from petroleum's economic volatility.

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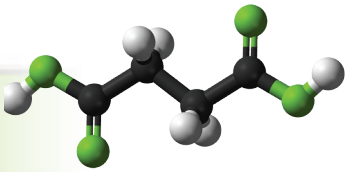
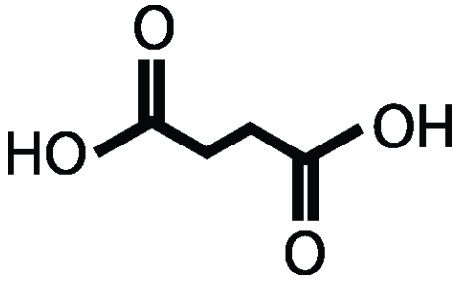
Succinic Acid
Specifications Sheet



$C_4H_6O_4$



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