

PRODUCT TECHNICAL DATA SHEET**Bio-based Succinic Acid Personal Care Grade 99.5%** PTDS# 003
February 2, 2017
Version: 6**Description**

Succinic acid is pre-registered under REACH (17-2120118310-76-0000). Succinic acid also meets the NF and FCC monograph standards for purity. Bio-based succinic acid was reviewed under GRAS Notice No. GRN 000552 and included in FDA's GRAS Notice Inventory. Succinic acid is USDA BioPreferred®.

Characteristics

| | | | |
|-------------------|--------------------------|----------------------|-------------------------|
| CAS Number: | 110-15-6 | Mercury: | < 1 mg/kg |
| EINECS Number: | 203-740-4 | Lead: | < 1 mg/kg |
| Molecular Weight: | 118.09 g/mol | Arsenic: | <1 mg/kg |
| Melting Point: | 185°C - 190°C | Purity: | >99.5% (Titration NaOH) |
| Boiling Point: | 235°C | Moisture: | ≤0.5% |
| Appearance: | White Crystalline Powder | Other Organic Acids: | <0.1% |

Storage/Coding/Transportation

BioAmber's Bio-based Succinic acid shelf life is 2 years from production date and should be stored indoors in its unopened original package in a dry and well-ventilated space.

Lot coding is found on the package.

For transportation this is not dangerous goods as per US DOT, IMDG or IATA

Manufacturing Facility:

BioAmber Sarnia Inc.
1201 Vidal Street South
Sarnia, Ontario N7T 7M2
CANADA
Phone: +1-519-344-0065

E-mail: Sarnia.CustomerService@bio-amber.com

Package Size

1,000-kg bag

500-kg bag*

25-kg Bag*

* - Subject to availability

Safety Data Sheet

Product SDS/eSDS are available on our website at www.bio-amber.com and/or upon request at Sarnia.CustomerService@bio-amber.com

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1,000kg Bag



| | |
|----------------------------|-----------------------------------------------|
| Package Size: | 1,000-kg polypropylene bag |
| Bag Dimensions: | 41"W, 41"L, 49"H 104cm W, 104cm L, 125cm H |
| Product Net Weight: | 1,000kg |
| Pallet Dimensions: | 44"W, 44"L, 5"H 112 cm W, 112 cm L, 13cm H |

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500kg Bag



| | |
|----------------------------|-----------------------------------------------|
| Package Size: | 500-kg polypropylene bag |
| Bag Dimensions: | 36"W, 36"L, 39"H 92cm W, 92cm L, 99cm H |
| Product Net Weight: | 500kg |
| Pallet Dimensions: | 44"W, 44"L, 5"H 112 cm W, 112 cm L, 13cm H |

25kg Bag



| | |
|----------------------------|-----------------------------------------------|
| Package Size: | 25-kg Kraft paper bag |
| Product Net Weight: | 1,000 kg Full pallet = 40 bags |
| Pallet Dimensions: | 44"W, 44"L, 5"H 112 cm W, 112 cm L, 13cm H |