Seabuckthorn
for food and beverage applications
Seabuckthorn Puree (- Seabuckthorn Pulp -)

Organic grade

- SPECIFICATIONS -

**Extraction:**
The fruit puree is produced by straining the berry mash of biologically cultivated fruit as a cloudy pressed product.

**Product information:**
The organic Seabuckthorn Puree does not contain any additives.
The organic Seabuckthorn Puree is a natural product and is subject to the natural variations of fluctuation.

**Chemico-physical indexes:**
- Solid-matter content refr. at 20°C: 5 - 11 %
- Density: 1.02 - 1.044
- pH: 2.4 - 3.0
- Total acid content g/l: 22 - 27 g/L
  (calculated as tartaric acid at pH 7)
- Vitamin C: 70 - 200 mg/100mL
- Volatile acid: < 0.4 g/L
- Alcohol content: < 3 g/L

**Sensory properties:**
- Colour: Orange - coral red
- Appearance: Intensely cloudy; containing fruit pulp
- Smell/taste: Acidic, herbal, fruity

**Microbiological data:**
- Total bacterial count: < 100/g
- Yeasts: < 10/g
- Mould: < 10/g
- E-coli and other coliform germs: negative in 1 g
Packaging:
Bag-in-box (3 L (net) and 10 L (net)), drums (200 L (net)) and deposit containers (1000 L (net)). Also delivered in a tanker lorry (loaded at max. 10°C).

Declaration:
The product conforms with the corresponding statutory food regulations of the Federal Republic of Germany and the European Union.

Storage:
The organic Seabuckthorn Puree is supplied in a high short-time heated and re-cooled state. If it is not processed within 24 hours then aseptic storage, preferentially under nitrogen, is necessary.

Use:
This organic Puree is intended for the production of all corresponding foods such as all kinds of drinks, fruit preparations for milk and ice cream desserts, and bread spreads.

Shelf-life:
2 years after production date.
Seabuckthorn Juice organic grade
- Whole Juice -

- SPECIFICATIONS -

**Extraction:**
The fruit juice is produced by straining a berry mash of biologically cultivated fruit as a pressed cloudy juice product.

**Product information:**
The organic Buckthorn Juice does not contain any additives. The organic Buckthorn Juice is a natural product and is subject to the natural variations of fluctuation.

**Chemico-physical indexes:**
- Solid-matter content refr. at 20°C: 5.0 - 9.5 %
- Density: 1.02 - 1.034
- pH: 2.4 - 3.0
- Total acid content: 22 - 27 g/L
  (calculated as tartaric acid at pH 7)
- Vitamin C: 70 - 250 mg/100 mL
- Volatile acid: < 0.4 g/L
- Alcohol content: < 3 g/L

**Sensory properties:**
- Colour: Orange - coral red
- Appearance: Intensely cloudy, containing fruit pulp
- Smell/taste: Acidic, herbal, fruity

**Microbiological data:**
- Total bacterial count: < 100/g
- Yeasts: < 10/g
- Mould: < 10/g
- E-coli and other coliform germs: negative
Packaging:
Bag-in-box (3 L (net) and 10 L (net)), drums (200 L (net)) and deposit containers (1000 L (net)). Also delivered in a tanker lorry (loaded at max. 10°C).

Declaration:
The product conforms with the corresponding statutory food regulations of the Federal Republic of Germany and the European Union.

Storage:
The Juice is supplied in a high short-time heated and re-cooled state. If it is not processed within 24 hours then aseptic storage, preferentially under nitrogen, is necessary.

Use:
This Juice is intended for the production of all corresponding foods such as all kinds of drinks, fruit preparations for milk and ice cream desserts, bread spreads.

Shelf-life:
2 years after production date.

Attention:
Shake the juice before using.
Buckthorn Juice - Skimmed
Organic grade

- SPECIFICATIONS -

Extraction:
The fruit juice is produced by straining the berry mash of biologically cultivated fruit
as a pressed cloudy juice product. Fats, particularly in the form of oil, contained in
the mash are completely removed in their natural form from the juice by a special
process.

Product information:
The organic Seabuckthorn Juice does not contain any additives.
The organic Seabuckthorn Juice is a natural product and is subject to the natural
variations of fluctuation.

Chemico-physical indexes:
Solid-matter content refr. at 20°C: 5 - 9.5 %
Density: 1.02 - 1.034
pH: 2.5 - 3.0
Total acid content: 22 - 27 g/L
(calculated as tartaric acid at pH 7)
Vitamin C: 70 - 200 mg/100 mL

Sensory properties:
Colour: Pale orange - coral red
Appearance: Intensely cloudy, containing fruit pulp
Smell/taste: Acidic, herbal, fruity

Microbiological data:
Total bacterial count: < 1900 KbE/g
Yeast: < 500 KbE/g
Mould: < 100 KbE/g
Lactic acid bacteria: < 500 KbE/g
**Packaging:**
Bag-in-box (3 L (net) and 10 L (net)), drums (200 L (net)) and deposit containers (1000 L (net)). Also delivered in a tanker lorry (loaded at max. 10°C).

**Declaration:**
The product conforms with the corresponding statutory food regulations of the Federal Republic of Germany and the European Union.

**Storage:**
The Juice is supplied in a high short-time heated and re-cooled state. If it is not processed within 24 hours then aseptic storage, preferentially under nitrogen, is necessary. If the Juice is supplied in bag in boxes or drums, then it is aseptically packed.

**Use:**
This Juice is intended for the production of all corresponding foods such as all kinds of drinks, fruit preparations for milk and ice cream desserts, bread spreads.

**Shelf-life:**
2 years after production date.
Organic Seabuckthorn Fruit Powder - Type 35/65
Spray-dried with malto-dextrine carrier substance

- SPECIFICATIONS -

Seabuckthorn Fruit Powder is produced by spray drying. Organic malto-dextrine carrier substance is added to ensure the pourability of the fruit powder. Approx. 5.5 to 6.5 Kg of fresh organic Seabuckthorn mash is required to produce one kilo of fruit powder.

**Physical and chemical data:**
- **Appearance**: Fine yellow powder
- **Taste/smell**: Seabuckthorn typical; acidic and fruity
- **Spray-drying carrier substance**: Organic malto-dextrine, 65%
- **Water content**: < 4%
- **Vitamin C**: at least 800 mg/100 g
- **Beta-carotene**: at least 15 mg/100 g
- **Total carotenoid oxides**: at least 30 mg/100 g
- **Calorific value KJ (Kcal)**: 1577.7 (373.1)
- **Carbohydrates**: 76.7 %
  - Of which sugar: 16.0 %
- **Fat**: 6.3 %
  - Of which saturated fatty acids: 2.1 %
- **Protein**: 2.4 %
- **Roughage**: 1.0 %

**Microbiological data:**
- **Total bacterial count**: max. 10,000/g
- **E.coli**: Negative
- **Coliform bacteria in 0.1 g**: Negative
- **Salmonella in 25 g**: Negative
- **Yeasts**: Max. 1,000/g
- **Mould**: Max. 500/g

**Packaging:**
Kraft paper with inserted PE-bag - 25 Kg (net).

**Storage:**
In sealed original containers; store protected from light, cool and dry. Minimum storage life 12 months.
Seabuckthorn Juice Concentrate - Naturally Cloudy
Organic grade
- SPECIFICATIONS -

Origin and description of the product
The organic Seabuckthorn Juice Concentrate is produced from healthy and ripe buckthorn berries of German biologically cultivated origin.

Storage, delivery, transport
The product is stored in stainless steel tanks and is delivered in canisters, barrels or stainless steel containers.
The minimum storage life in bag in boxes (3 L (net) and 10 L (net)) and drums (200 L (net)) are 12 months. Otherwise in 1000 L (net) deposit containers - upon delivery: 6 months in cooled storage. For sensory reasons we recommend that the product is consumed as soon as possible.

Food-technical and physical data:
Brix (20°C, ref.): 50.0 +/- 1.0
Total acid (pH 7.0 as tartaric acid): 200 +/- 10 g/Kg
pH value: approx. 2.3
Density (20°C): approx. 1.36
Colour (CIE Lab): L: 23.92; a: 0.32; b: 0.56
Vitamin C: approx. 770 mg/100 g

Microbiological data when the product arrives:
Total bacterial count: < 1000/g juice Standard Agrar
Mould and osmophile yeasts; < 10/g juice Orange serum agrar
Free of heat-resistance spore formers

Sensoric parameters:
Fruit-typical colour, appearance, smell and taste.

Food-law declaration:
The organic Seabuckthorn Juice Concentrate conforms with German Food Legislation, especially the Fruit Juice Ordinance, the Guidelines of the Fruit Juice Industry, RSK (approximate values, variation latitude and indexes), as well as the German Plant Protection Maximum Amount Ordinance. Buckthorn juice concentrate is, therefore, free of pesticide residues, preservatives, colourants and foreign matter. It is produced without any additives, particularly sugar and acids.
Seabuckthorn Juice - Skimmed
Conventional grade

- SPECIFICATIONS -

Extraction:
The fruit juice is produced by straining a berry mash of conventionally cultivated fruit as a pressed cloudy juice product. Fats, particularly in the form of oil, contained in the mash are completely removed in their natural form from the juice by a special process.

Product information:
Buckthorn Juice does not contain any additives.

Chemico-physical indexes:
Solid-matter content refr. at 20°C: 5 - 9.5 %
Density: 1.02 - 1.034
pH: 2.5 - 3.0
Total acid content: 22 - 27 g/L
(calculated as tartaric acid at pH 7)
Vitamin C: 70 - 200 mg/100 mL

Sensory properties:
Colour: Pale orange - coral red
Appearance: Intensely cloudy, containing fruit pulp
Smell/taste: Acidic, herbal, fruity

Microbiological data:
Total bacterial count: < 1900 KbE/g
Yeast: < 500 KbE/g
Mould: < 100 KbE/g
Lactic acid bacteria: < 500 KbE/g
Packaging:
Bag-in-box (3 L (net) and 10 L (net)), drums (200 L (net)) and deposit containers (1000 L (net)). Also delivered in a tanker lorry (loaded at max. 10°C).

Declaration:
The product conforms with the corresponding statutory food regulations of the Federal Republic of Germany and the European Union.

Storage:
The Juice is supplied in a high short-time heated and re-cooled state. If it is not processed within 24 hours then aseptic storage, preferentially under nitrogen, is necessary. If the Juice is supplied in bag in boxes or drums, then it is aseptically packed.

Use:
This Juice is intended for the production of all corresponding foods such as all kinds of drinks, fruit preparations for milk and ice cream desserts, bread spreads.

Shelf-life:
2 years after production date.
Seabuckthorn Juice conventional grade
- Whole Juice -

- SPECIFICATIONS -

**Extraction:**
The fruit juice is produced by straining a berry mash of conventionally cultivated fruit as a pressed cloudy juice product.

**Product information:**
Buckthorn Juice does not contain any additives.
Buckthorn Juice is a natural product and is subject to the natural variations of fluctuation.

**Chemico-physical indexes:**
- Solid-matter content refr. at 20°C: 5.0 - 9.5 %
- Density: 1.02 - 1.034
- pH: 2.4 - 3.0
- Total acid content: 22 - 27 g/L (calculated as tartaric acid at pH 7)
- Vitamin C: 70 - 250 mg/100 mL
- Volatile acid: < 0.4 g/L
- Alcohol content: < 3 g/L

**Sensory properties:**
- Colour: Orange - coral red
- Appearance: Intensely cloudy, containing fruit pulp
- Smell/taste: Acidic, herbal, fruity

**Microbiological data:**
- Total bacterial count: < 100/g
- Yeasts: < 10/g
- Mould: < 10/g
- E-coli and other coliform germs; negative
Packaging:
Bag-in-box (3 L (net) and 10 L (net)), drums (200 L (net)) and deposit containers (1000 L (net)). Also delivered in a tanker lorry (loaded at max. 10°C).

Declaration:
The product conforms with the corresponding statutory food regulations of the Federal Republic of Germany and the European Union.

Storage:
The Juice is supplied in a high short-time heated and re-cooled state. If it is not processed within 24 hours then aseptic storage, preferentially under nitrogen, is necessary.

Use:
This Juice is intended for the production of all corresponding foods such as all kinds of drinks, fruit preparations for milk and ice cream desserts, bread spreads.

Shelf-life:
2 years after production date.

Attention:
Shake the juice before using.
Seabuckthorn Puree (- Seabuckthorn Pulp -)

Conventional grade

- SPECIFICATIONS -

**Extraction:**
The fruit puree is produced by straining the berry mash of biologically cultivated fruit as a cloudy pressed product.

**Product information:**
The Seabuckthorn Puree does not contain any additives. The Seabuckthorn Puree is a natural product and is subject to the natural variations of fluctuation.

**Chemico-physical indexes:**
Solid-matter content refr. at 20°C: 5 - 11 %
Density: 1.02 - 1.044
pH: 2.4 - 3.0
Total acid content g/L: 22 - 27 g/L (calculated as tartaric acid at pH 7)
Vitamin C: 70 - 200 mg/100 mL
Volatile acid: < 0.4 g/L
Alcohol content: < 3 g/L

**Sensory properties:**
Colour: Orange - coral red
Appearance: Intensely cloudy; containing fruit pulp
Smell/taste: Acidic, herbal, fruity

**Microbiological data:**
Total bacterial count: < 100/g
Yeasts: < 10/g
Mould: < 10/g
E-coli and other coliform germs: negative in 1 g
Packaging:
Bag-in-box (3 L (net) and 10 L (net)), drums (200 L (net)) and deposit containers (1000 L (net)). Also delivered in a tanker lorry (loaded at max. 10°C).

Declaration:
The product conforms with the corresponding statutory food regulations of the Federal Republic of Germany and the European Union.

Storage:
The conventional Seabuckthorn Puree is supplied in a high short-time heated and re-cooled state. If it is not processed within 24 hours then aseptic storage, preferentially under nitrogen, is necessary.

Use:
This Puree is intended for the production of all corresponding foods such as all kinds of drinks, fruit preparations for milk and ice cream desserts, and bread spreads.

Shelf-life:
2 years after production date.
Address of the producer:
Sanddorn GbR
An den Steinenden 3 EU control system
04916 Herzberg/Germany EU-Control-No.: DE-BB-021-2321-BD
Tel. +49 353548582-13, Fax: -15 Code-No.: DE - 021 - Öko-Kontrollstelle
E-Mail: sanddorn_gbr@t-online.de

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**Grünstempel® - Ökoprüfstelle e.V.**
EU-Kontrollstelle für ökologische Erzeugung und Verarbeitung landwirtschaftlicher Produkte
Bio-Code-Nummer: DE-ÖKO-021

**CERTIFICATION**

Documentary evidence to the operator according to Article 29 (1) of Regulation (EC) No 834/2007

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**Operator:**
Sanddorn GbR
Lückenwalder Straße 5a
14813 Hohensoefd

**EU control number:** DE-BB-021-2321-BD
**Main activity:** processing

**Product groups/Activity:**
- Processed products

**Defined as:**
- Organic production: Sea buckthorn products
- Commercial products
- In-conversion products: none

**Validity period:**
All products from October 8, 2011 to the completed annual inspection 2012, longest until December 31, 2012

**Date of control(s):** August 25, 2011

**Date, place:**
May 15, 2012, Wanzleben

**Signature on behalf of the issuing control body:**

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