



TECHNICAL DATA PACKAGE

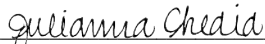
BILBERRY EXTRACT 25%

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SUANFARMA

PRODUCT SPECIFICATION SHEET

REVISION 1.2020

| <u>IDENTIFICATION</u> | | |
|---|----------------------------|---|
| NAME | BILBERRY EXTRACT 25% | |
| BOTANICAL NAME | <i>Vaccinium myrtillus</i> | |
| PLANT PART USED | Fruit | |
| FRESH/DRY | Fresh | |
| SOLVENT(S) USED | 85% Ethanol/Water | |
| FINAL EXTRACT RATIO | 80:1 Approx. | |
| PRODUCT CODE | BBE25 | |
| SHELF LIFE | 24 Months | |
| COUNTRY OF ORIGIN | China | |
| <u>PHYSICAL & CHEMICAL ANALYSIS</u> | | |
| <u>PARAMETER</u> | <u>SPECIFICATION</u> | <u>METHODS</u> |
| 1. APPEARANCE | Fine Powder | Organoleptic |
| COLOR | Dark Violet | Organoleptic |
| ODOR | Characteristic | Organoleptic |
| FLAVOR | Characteristic | Organoleptic |
| 2. IDENTIFICATION | Positive by HPLC | HPLC |
| 3. PARTICLE SIZE | 100% through 80 mesh | Sieve analysis |
| 4. LOSS ON DRYING | NMT 4.5% (w/w) | 3 hours at 105°C |
| 5. RESIDUE ON IGNITION | NMT 3.0% (w/w) | CP2015<0841> |
| 6. HEAVY METALS | NMT 20 ppm | As per JP |
| LEAD | NMT 3 ppm | AA |
| ARSENIC | NMT 2 ppm | AA |
| CADMIUM | NMT 1 ppm | AA |
| MERCURY | NMT 0.1 ppm | UV |
| 7. PESTICIDE RESIDUE | Complies per EP | GC-MS |
| 8. SOLVENT RESIDUE | Complies per EP | GC-HS |
| 9. AFLATOXINS | Complies per USP | TLC |
| 10. ANTHOCYANINS | NLT 25.0% (w/w) | HPLC |
| <u>MICROBIOLOGY CONTROL</u> | | |
| TOTAL PLATE COUNT | NMT 1,000 cfu/g | WHO/PHARMA/92.559 Rev.1, Pg. 49 |
| YEAST & MOLD | NMT 100 cfu/g | WHO/PHARMA/92.559 Rev.1, Pg. 49 |
| ENTEROBACTERIA | NMT 100 org/g | WHO/PHARMA/92.559 Rev.1, Pg. 49 |
| E. COLI | Absent/g | WHO/PHARMA/92.559 Rev.1, Pg. 49 |
| SALMONELLA | Absent/10g | WHO/PHARMA/92.559 Rev.1, Pg. 49 |
| <p><u>STORAGE CONDITIONS:</u> PRESERVE IN TIGHTLY-SEALED CONTAINERS UNDER COOL, DRY CONDITIONS. AVOID EXCESSIVE EXPOSURE TO SUNLIGHT. <u>MANUFACTURING SITE:</u> THIS MATERIAL HAS BEEN CUSTOM MADE AND PROCESSED AT 236 N. JIANGUO ROAD, 15F HANGZHOU, ZHEJIANG 310003 CHINA TO MEET SUAN FARMA, INC. SPECIFICATIONS.</p> | | |
| | |  Julianna Chedid, QA/QC Assistant DATE PRINTED: May 28, 2020 |



ALLERGEN STATEMENT

We, Suan Farma, Inc., hereby declare that **Bilberry Extract 25%** (product code: **BBE25**) does not contain the following allergens:

- Alcohol*
- Animal Source Products
- Artificial Colors
- Berries (specify)#
- Corn products
- Dairy products
- Egg products
- Fish/Shellfish
- Flavors
- MSG
- Peanuts
- Peanut oil
- Safflower oil
- Sesame oil
- Sweeteners
- Sodium (% unit dose)
- Sunflower oil
- Preservatives
- Rice
- Starch (source)
- Soy products
- Sulfites
- Tartrazine
- Tree Nuts
- Tree Nut oil
- Wheat products/Gluten
- Lupin
- Mollusks
- Celery
- Mustard
- Sesame seeds
- Sulphur dioxide

* Ethanol/Water is used as extract solvent in this product, and Ethanol residue complies with E.P. limits

Bilberry used as the raw material

Regards,

Julianna Chedid

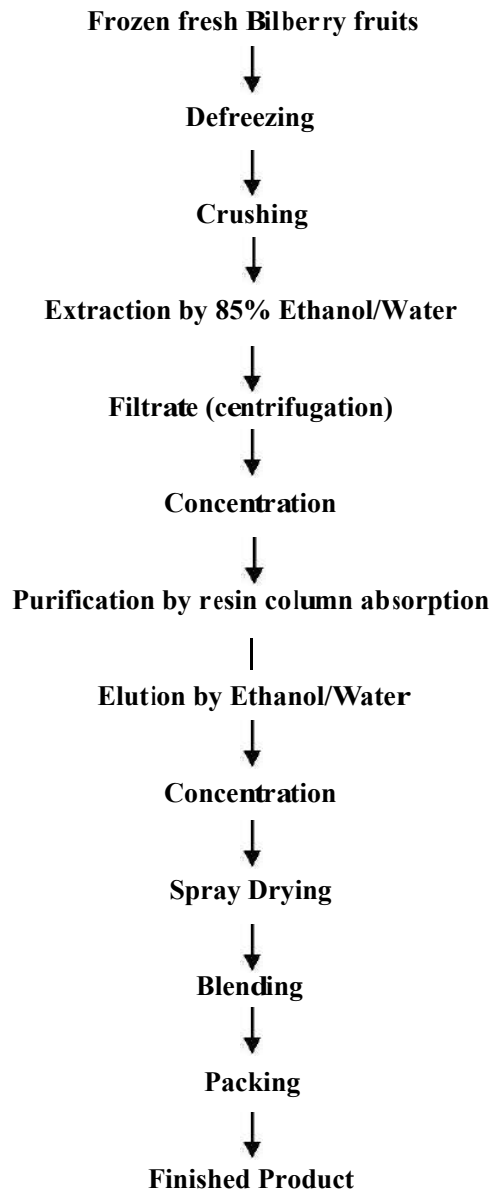
Julianna Chedid
QA/QC Assistant
Suan Farma, Inc.
May 2020



MANUFACTURING PROCESS FLOW CHART

Product Name: Bilberry Extract 25%

Product Code: BBE25





SAFETY DATA SHEET

REVISION 01.2020

SECTION 1: PRODUCT & COMPANY IDENTIFICATION

Product name BILBERRY EXTRACT 25%
Botanical name *Vaccinium myrtillus*
Common name Bilberry

Preparation type Extract dry concentrate standardized

Supplier name: Suan Farma, Inc.
17-09 Zink Place, Unit 7 Fair Lawn, NJ 07410
Phone: 201-343-1188
FAX: 201-343-1102
E-mail: adminus@suanfarma.com

Emergency telephone number: CHEMTREC (24-hr Access) 800-424-9300;
International CHEMTREC, call: 703-527-3887

SECTION 2: HAZARD(S) IDENTIFICATION

Principal Hazardous Components: Not Found

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component Name: Anthocyanins, 25%

SECTION 4: FIRST AID MEASURES

Skin Contact: Wash the affected area with soap and water.
Eye Contact: Wash eyes with copious amounts of water for 5 minutes.
Inhalation: Remove victim to fresh air. If breathing stopped, administer respiration. Contact physician.
Ingestion: Do not induce vomiting. Consult physician.

SECTION 5: FIRE FIGHTING MEASURES

General: Low hazard, Dust/Air mixture may ignite or explode.
Means of Extinction: Water spray, dry chemical, carbon dioxide or foam or as appropriate for surrounding fire and material.
Flammability Limits: Not established
Autoignition Temperature: Not established
Hazardous Decomposition Products: Oxides of carbon

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate eye, skin and respiratory protective equipment.



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Environmental Precautions: Do not discharge into drains, sewers, surface waters, and ground waters.
Methods of Cleaning: Contain and transfer material to secure containers. Absorb excess on absorbent material. Clean up spill with detergent solutions. Dispose of in accordance to local Regulations.

SECTION 7: HANDLING AND STORAGE

Precautions to be taken in handling: Avoid inhalation of dust, mist, vapors of associated material, wash thoroughly after handling.
Storage: Store at room temperature in airtight container, extract is hygroscopic. Handle it with care. Keep containers tightly closed after use. Store in a cool dry place.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection: While working with small quantities in a well-ventilated area, respiratory protection is not required. The use of an approved dust mask is recommended.
Ventilation: Well-ventilated environment with exhaust facility.
Protective gloves: Use rubber/surgical gloves.
Eye Protection: Wear safety goggles.
Protective clothing & equipment: Wear suitable protective clothing to protect exposed skin, wear headgear and mask.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid at 25°C
Odor and Appearance: Fine dark violet powder with characteristic odor and taste
Solubility in Water: Soluble
Melting Point: Not determined

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage condition
Conditions to avoid: Avoid exposure to moisture, air and light.
Incompatibility: None known
Hazardous polymerization: Will not occur.

SECTION 11: TOXICOLOGY INFORMATION

Rodent (LD50): Not applicable
Skin irritation: Not observed
Phototoxicity: Not observed
Caution: Avoid oral use in patients with alcoholism & liver disease.

SECTION 12: ECOLOGICAL INFORMATION

General: No ecological information is known for this product.
SUAN FARMA, INC. 17-09 ZINK PLACE, UNIT 7, FAIR LAWN, NJ 07410, USA www.suanfarmausa.com



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SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of product in accordance with local regulations.
Packaging Disposal: Empty containers retain product residue. Observe all hazard precaution. Dispose of containers in accordance with local regulations.

SECTION 14: TRANSPORT INFORMATION

Shipping Description: Plant extract powder
Special Precautions: None
DOT Hazardous Class: Not a hazardous material for D.O.T. shipping

SECTION 15: REGULATORY INFORMATION

OSHA: This product is not classified into any OSHA Hazard categories.
TSCA Status: All components are lists on the TSCA inventory.
CERCLA: Spills are not subject to special reporting by Cercla.
RCRA: Not specified
SARA Title III: This product is not classified into any SARA categories.
State Regulatory Information: Not specified.
International Regulatory Information: Not Known.

SECTION 16: OTHER INFORMATION

Further information

This information is based upon the present state of our knowledge. This SDS had been compiled and is solely intended for this product.

Notice to reader

Employers should use this information only as a supplement to other information gathered by them and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this Safety Data Sheet or in combination with any other product or process is the responsibility of the user.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information and we assume no liability resulting from its use, users should make their own investigations to determine the suitability of the information for their purposes. In no way shall the company be liable for any claims, losses. or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.



ADDITIONAL INFORMATION

We, Suan Farma, Inc., hereby declare that **Bilberry Extract 25%** (product code: **BBE25**) is manufactured in accordance with the following guidelines:

- No animal derived products have been used in the manufacture of the above extract, making it free from components which can cause Bovine Spongiform Encephalopathy (BSE) or Transmissible Spongiform Encephalopathy (TSE).
- Genetically modified organisms (GMOs) are living organisms whose genetic material has been artificially manipulated in a laboratory through genetic engineering. Bilberry Extract 25% has not been genetically modified or exposed to genetically modified organisms during the production process and is therefore GMO free.
- No excipients, carriers, binders, or preservatives are used in the manufacture of the above material. It is composed of 100% bilberry (*Vaccinium myrtillus*) extract with an Anthocyanin content of NLT 25%.
- The above extract has not been irradiated per 7 CFR 205.105(f) requirements with the understanding that "irradiation" shall be defined as outlined in 21 CFR 179.26.
- The above extract has not been treated with Ethylene Oxide (ETO) or any other form of chemical sterilization.
- Bilberry Extract 25% is suitable for both vegetarian and vegan consumption.
- The above extract is manufactured in China, and the Bilberry fruit raw material is sourced from Europe.

Typical nutritional data for the above extract is as follows:

Per 100 grams

| | |
|----------------------|------------|
| Protein | 1.6 grams |
| Fat | 1.6 grams |
| Carbohydrates | 96.3 grams |
| Energy | 406.0 kCal |

Regards,

Julianna Chedid

Julianna Chedid
QA/QC Assistant
Suan Farma, Inc.
May 2020