
石家庄健禾生物科技有限公司

葡萄籽提取物

健禾生物
2014/8/1



JHvitis™ Grape Seed P.E.

Anti-Oxidant / Anti-Aging

OPC/ Polyphenol / ORAC Value



Grape seed extracts are industrial derivatives from whole grape seeds that have a great concentration of vitamin E, flavonoids, linoleic acid, and

OPCs. Typically, the commercial opportunity of extracting grape seed constituents has been for chemicals known as polyphenols, including oligomeric proanthocyanidins recognized as antioxidants.

Potential anti-disease effects

Human case reports and results from laboratory and animal studies show that grape seed extract may be useful to treat heart diseases such as high blood pressure and high cholesterol. By limiting lipid oxidation, phenolics in grape seeds may reduce risk of heart disease, such as by inhibiting platelet aggregation and reducing inflammation. While such studies are promising, more research including long-term studies in humans is needed to confirm initial findings.

A polyphenol contained in grape seeds is resveratrol which may interfere with cancer cell growth and proliferation, as well as induce apoptosis, among a variety of potential chemopreventive effects.

Grape seed components may also be active against HIV by inhibiting virus expression and replication.

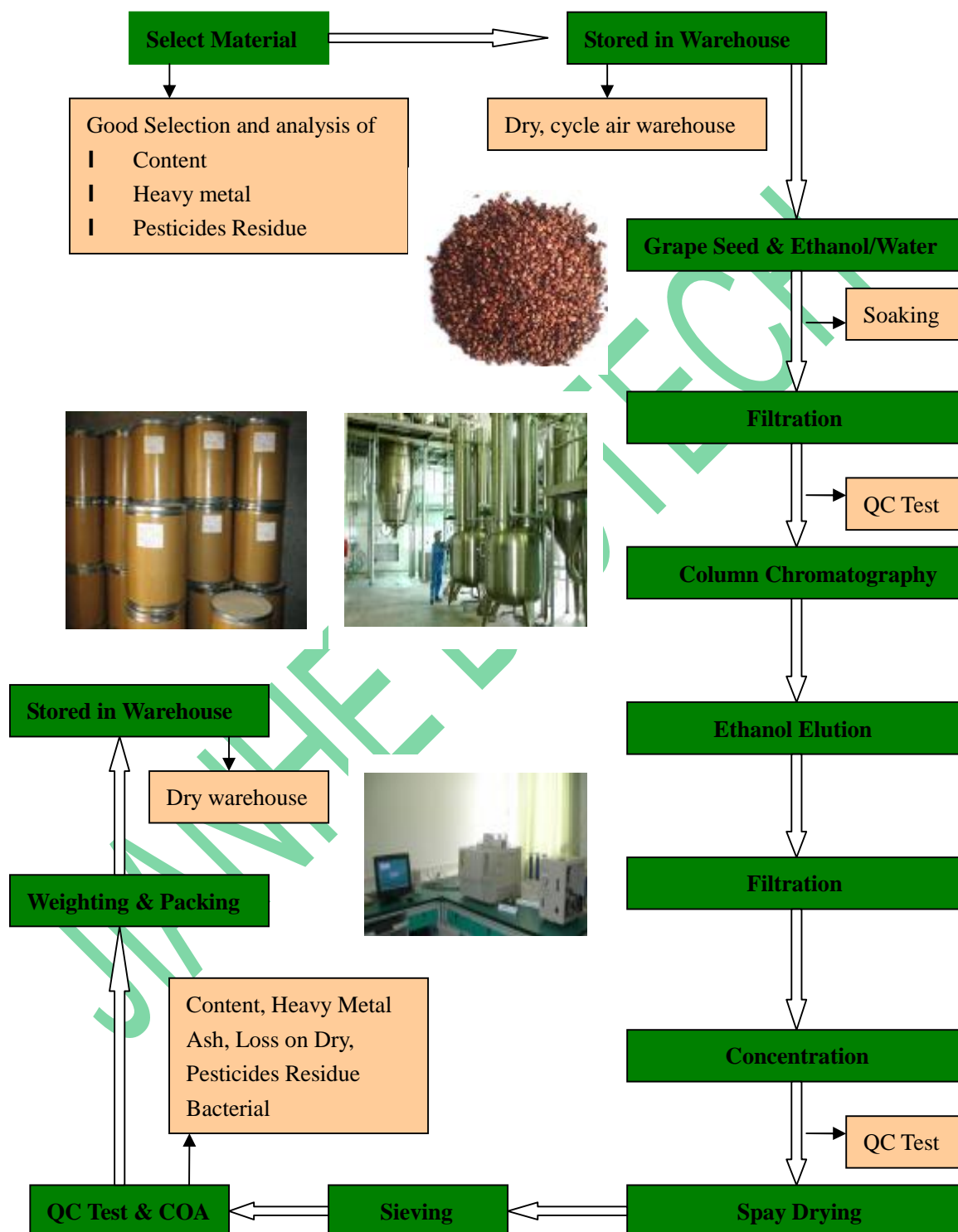
Preliminary research shows that grape seed extract may have other possible anti-disease properties, such as in laboratory models of

- Wound healing—grape seed proanthocyanidins induced vascular endothelial growth factor and accelerated healing of injured skin in mice.
- Tooth decay --seed phenolics may inhibit oral sugar metabolism and retard growth of certain bacteria causing dental caries.
- Osteoporosis -- grape seed extracts enhanced bone density and strength in experimental animals.
- Skin cancer -- grape seed proanthocyanidins decreased tumor numbers and reduced the malignancy of papillomas.
- Ultraviolet damage to skin—dietary proanthocyanidins may protect against carcinogenesis and provide supplementation for sunscreen protection.

There is good evidence that grape seed extract can help treat chronic venous insufficiency and edema.

Currently, there are four clinical trials underway to assess the effect of grape seed extracts on human breast cancer, blood estrogen levels in postmenopausal women, and coronary artery disease.

Flow Chart Of Grape Seed Extract





Specification of Grape Seed P.E.

ITEMS	SPECIFICATIONS	METHOD
Appearance	Fine Brownish Powder	Visual
Nature	Extract From Grape Seeds	Visual
Odor	Characteristic	Organoleptic
Taste	Astringent and Bitter	Organoleptic
Origin	Vitis Vinifera	Biological Taxonomy
Proanthocyanidins	≥95%	UV, Beta-Smith
T. Polyphenols	≥75%	UV, Folin-C, Gallic Acid
T. Polyphenols	≥80%	UV (Do 280nm), Catechin
Loss on Drying	≤5%	5g / 105°C / 2hrs
Ashes	≤5%	2g / 525°C / 3hrs
Bulk Density	30~50g/100ml	Density meter
Partical Size	100% Through 80 Mesh	80 mesh sieve
Solubility in Water	≥100%	2g in 100ml Water, 25°C, Filtration
Extract Solvent	Water & Ethanol	Jianhe Biotech
Heavy Metals	< 10ppm	Atomic Absorption
Lead(Pb)	< 2ppm	Atomic Absorption
Arsenic(As)	< 2ppm	Atomic Absorption
Cadmium(Cd)	< 0.5ppm	Atomic Absorption
Mercury(Hg)	< 0.2ppm	Atomic Absorption
T. Sulphites	< 20ppb	Atomic Absorption
Aflatoxins	< 2ppb	HPLC
Ochratoxin	< 2ppb	HPLC
Pesticides Residue	Complies	Eur. Ph. 2000
Total Plate Count	<1000CFU/G	GB/T4789.27-2003
Yeast and moulds	<100 CFU/G	GB/T4789.15-2003
E.coli	Negative	GB/T4789-2003
Salmonella	Negative	GB/T4789-2003
Staphylococcus aureus	Negative	GB/T4789-2003
Enterobacteries	<1000CFU/G	GB/T4789.12-2003
Irradiation	Complies	Irradiation Free
Packing and Storage	Pack in paper-drums and two plastic-bags inside. Net Weight: 25kgs/drums. Store in a well-closed container away from moisture.	
Shelf Life	2 years if sealed and store away from direct sun light.	



MOA of Proanthocyanidins--Grape Seed P.E. by UV

I. Apparatus and Reagent:

Ultra-violet visible spectrophotometer

2% $\text{NH}_4\text{Fe}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$ of muriatic acid solution: Accurately weigh 17ml of concentrated HCL, add water to 100ml, then add 2g of $\text{NH}_4\text{Fe}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$, fully shake.

Acid nbutanol solution: Mix 95ml of nbutanol with concentrated HCL.

II. Preparation of solution

1. Preparation of sample solution: Accurately weigh 100g of Grape Seed P.E. into 50ml volumetric flask, dilute to volume with methanol. Accurately pipette 2ml of solution into 50ml volumetric flask, volume with methanol to calibrate as test solution. Accurately pipette 1ml of test solution into 10ml plug tube. Add 0.2ml of 2% $\text{NH}_4\text{Fe}(\text{SO}_4)_2 \cdot 12\text{H}_2\text{O}$ of 2N HCL solution. Add 6ml of acid nbutanol solution. Screw down the cover and fully shake, then loose the cover and put it into 95°C water bath to have reaction for 60min, then cool down in the icy water bath, cool at room temperature. Dilute to 10ml with acid nbutanol solution to obtain the standard solution.

2. Preparation of standard solution: Replace sample solution with standard solution. Make it in accordance with the method of sample solution to obtain the standard solution.

3. Preparation of blank solution: Replace sample solution with methanol to obtain the blank solution.

III. Content calculation:

Turn on the apparatus and heat for 20min. when the apparatus finishes self-check, using blank solution as blank at 288nm to determine the absorption value of the standard solution and sample solution.

IV. Result

$$C\% = \frac{A \times W_s \times S}{A_s \times W} \times 100$$

A: Absorption value of sample

W: Sample weight (mg)

As: Absorption value of standard

Ws: Standard weight (mg)

S: Purity of standard



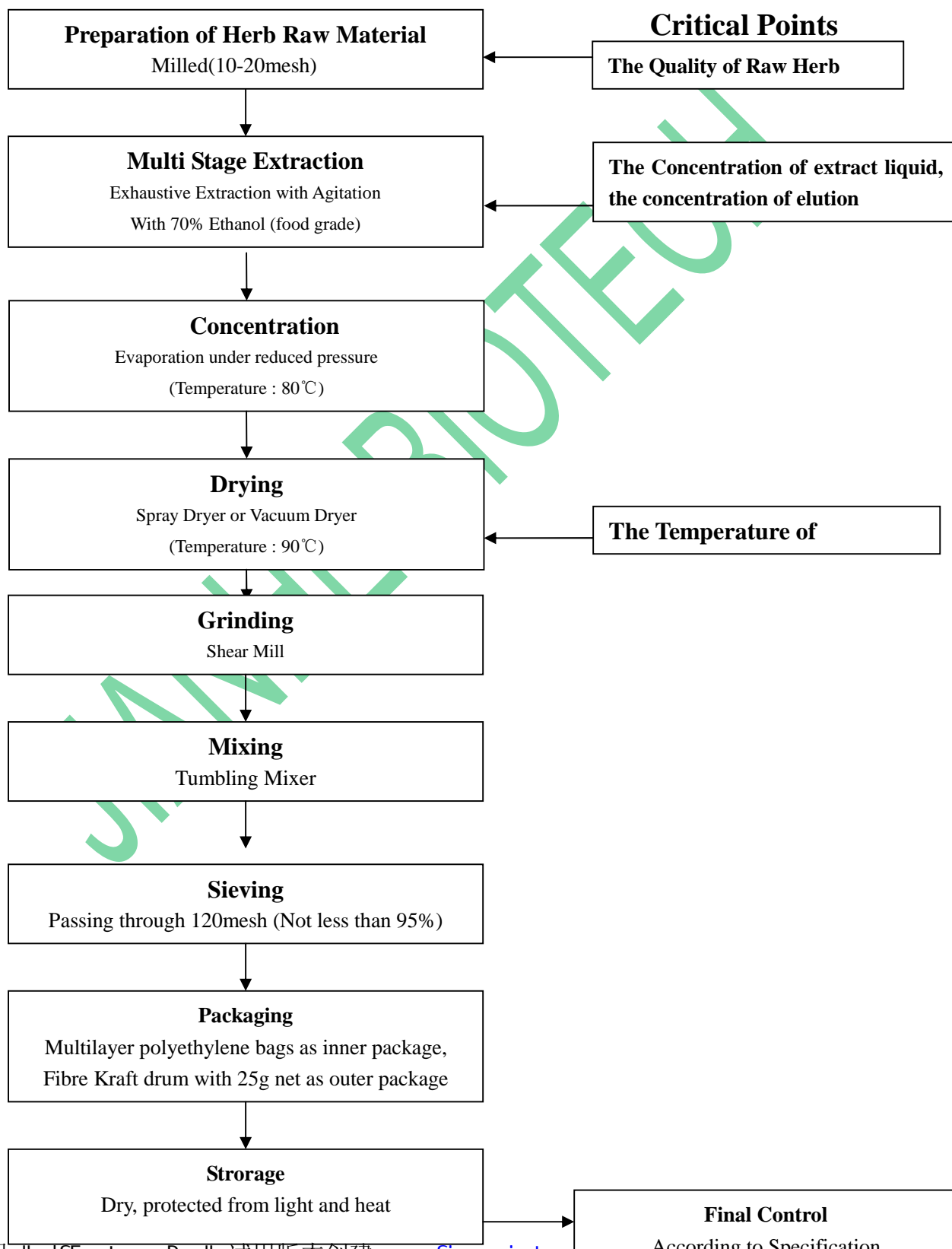
Production Flow Chart

Product Name: Grape Seed Extract Powder

Botanical Name: Vitis Venifera L.

Part: Seed

Solvent: Ethanol /Water (70% 30%)





ORAC Value Test Report



09/22/2011

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Certificate of Analysis

Customer: Shijiazhuang Jianhe Biotech Co., Ltd

Sample Identification:

Batch #: B-50183a

Date Received: 09/15/2011

Results:

Description	BL ID	Test	Result	Units
Grape Seed Extract, Powder, GSE-20110909	11-50064	ORAC _{total}	16,133	µmole TE/gram

* The acceptable precision is < 15% relative standard deviation.

The ORAC result is expressed as micromole Trolox equivalency (µmole TE).

With clean and cloudless soluble liquid :



Common Package and Special Package:



(Common Packing: 25kg/Drum / Special Packing: 5kg/Al.bag, 25kg/Drum)