Integrity, Natural, Reliable and Innovative

Naturalin is a Plant Extracts and Natural Ingredients manufacturer and its application solutions provider for Nutrition, Food & Beverage and Personal Care industries.
Naturalin is a Plant Extracts and Natural Ingredients manufacturer.

Founded in 2005, Naturalin develops plant extracts and natural ingredients for food & beverage, nutrition, personal care, hygiene, pet feed and agriculture industries, with focus on all the stages of the manufacturing process from raw materials to the final ingredients and its application solutions in industries.

Naturalin is a member of China Plant Extracts Standards Drafting Committee.

We believe the best ingredients can only come from the finest raw materials and manufacturing process controlling.

Qualification
HealthyNaturalin®

HealthyNaturalin® branded nutritional natural ingredients is designed and developed by Naturalin, applied for dietary supplements, functional foods and nutraceutical industries with different nutritional functions, as natural ingredients; it also could applied as natural additives to cover up bitter or bad smell from others in your products.

Ginseng Extract

Product Specification: 80% UV
Active ingredient: Ginsenosides
Extract Part: Stem & Leaf
Test Method: TLC, UV, HPLC

<table>
<thead>
<tr>
<th>Raw Material</th>
<th>Powder Extract</th>
<th>Molecular Formula</th>
<th>Liquid Color</th>
</tr>
</thead>
</table>

Function:
- Anti fatigue, anti-aging and brain health food;
- Freckle, wrinkle reduction, activation of skin cells, enhance the skin elasticity of cosmetics.

The HPLC chromatogram of ginseng extract
Milk Thistle Extract

Product Specification: 80% silymarin  
Source of Extraction: Dried seed from Silybum marianum(Linne) Gaertner  
Active Ingredient: Silymarin  
Extract Part: Seed  
Test Method: TLC, UV, HPLC

Function:
- Protecting liver cell membrane and improving the liver function;  
- Reducing the blood fat, beneficial to the gallbladder, detoxification;  
- Protecting the brain and removing the free radical of body;  
- Radiation hardening, arteriosclerosis preventing and skin-aging delaying.

Ganoderma Extract

Product Specification: 30% polysaccharides  
Plant Source Latin Name: Ganoderma Lucidum(Leyss ex Fr.)Karst  
Active ingredient: Polysaccharides  
Test Method: TLC, UV

Function:
- Protect anti-tumor;  
- Anti-aging & anti-allergic;  
- Strengthen immunity;  
- Promote the synthetic ability of DNA, RNA and protein in the liver, bone marrow and blood.

(The HPLC chromatogram of silybin standard)
- Silybin A retention time: 24.50min  
- Silybin B retention time: 27.00min

(The HPLC chromatogram of milk thistle extract)
Green Tea Extract

Product Specification:
98% polyphenols, 50% / 90% EGCG
Source of Extraction:
Dried leaves from Camellia sinensis
Active Ingredient:
Polyphenol, EGCG
Extract Part: Leaves
Test Method: UV, HPLC

Function:
• Tea polyphenols can protect easy-oxidant in the body from oxidizing through oxidized itself to made cellular activity normalize.
• Tea polyphenols can supply lots of protons, which combine with over 98% of these free radicals, there by stop next chemical reaction and protect the fat from further oxidizing.

Fucoxanthin

Product Specification: 10% Fucoxanthin
Source of Extraction: Algae from Laminaria japonica
Active Ingredient: Fucoxanthin
Extract Part: Algae
Test Method: UV, HPLC

Function:
• With similar polysaccharide structure to heparin, fucoidan has good anticoagulant activity;
• It has the inhibiting effect on the replication of several coated virus, such as human immunodeficiency and human cytomegalovirus;
• In addition to inhibiting the growth of cancer cells, it can also restrain the diffuse of tumor cells by enhancing immunity.

The HPLC chromatogram of EGCG: 50%

The HPLC chromatogram of EGCG: 90%

The UV-Visible scanning spectrum of purified fucoxanthin

The HPLC chromatogram of fucoxanthin
Ginkgo Biloba Extract

Function:
- Activate blood circulation to dissipate blood stasis;
- Enhance cerebrovascular flow;
- Reduce cerebral vascular resistance;
- Improve cerebral circulation;
- Remove harmful oxidized free radicals;
- Enhance immunity.

Product Specification: USP35
Source of extraction: Dried Leaves of Ginkgoaceae Ginkgo biloba L.
Active ingredient: Ginkgo Flavone, Ginkgo Bilobalide
Extract Part: Leaves
Test Method: TLC, HPLC

Grape Seed Extract

Function:
- Anti-Aging, cure of diseases associated with free radical damage;
- Prevention of pollen allergy;
- Increase the flexibility of bone and joint;
- Prevent capillary bleeding;
- Increase skin elasticity.

Product Specification: 95% OPC
Source of extraction: Seed of Vitaceae plant Vitis vinifera L.
Active ingredient: OPC
Extract Part: Seed
Test Method: UV, HPLC

Seven characteristic peaks are clearly visible
1. gallic acid; 2. Procyanidins B1, B3; 3. (+) - catechin; 4. procyanidin B2; 5. (-) - epicatechin; 6. (-) - epicatechin 3 - O' - gallic acid; 7. Oligomeric procyanidins.
The Characteristic peak of OPCs is Symmetric smoothing.
**Tongkat Ali Extract**

Product Specification: 200:1; 1% Eurycomanone

Source of extraction: Dried root of the Eurycoma longifolia Jack

Active ingredient: Eurycomanone

Extract Part: Root

Test Method: TLC, HPLC

**Function:**
Improving strength, reducing fatigue, sterilization, anti-ulcer and anti-hypertension, anti-diabetes.

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**Epimedium Extract**

Product Specification: 10% Icarin

Source of extraction: Dried leaves of Epimedium brevicornu Maxim

Active ingredient: Icarin

Extract Part: Leaves

Test Method: TLC, HPLC

**Function:**
Sexual Enhancement.

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**TLC Analysis Chart**

1. Tongkat ali extract raw material
2-3. Tongkat ali extract 200:1
4. Tongkat ali extract 1%

**The HPLC chromatogram of Eurycomanone standard**

**The HPLC chromatogram of tongkat ali extract 1%**

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**HPLC**

**The HPLC chromatogram of 100% Icarin Standard**

**The HPLC chromatogram of Epimedium Extract**
### Application Formula

We also customize formulas for your innovations, applications and final products to meet with your markets.

<table>
<thead>
<tr>
<th>NAT Code</th>
<th>English Name</th>
<th>Chinese Name</th>
<th>Latin Name</th>
<th>Main Spe.</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAT-005</td>
<td>Alalfa Extract</td>
<td>紫花苜蓿提取物</td>
<td>Medicago Sativa L.</td>
<td>5% Total Flavonoids</td>
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<tr>
<td>NAT-008</td>
<td>Aloe Vera Extract</td>
<td>芦荟提取物</td>
<td>Aloe Barbadensis Mill</td>
<td>20%-40% Aloin, 100:1 200:1</td>
</tr>
<tr>
<td>NAT-010</td>
<td>Angelica Extract</td>
<td>当归提取物</td>
<td>Angelica Sinesis</td>
<td>1% Ligustilides, 1% Fenid Acid</td>
</tr>
<tr>
<td>NAT-015</td>
<td>Artichoke Extract</td>
<td>朝鲜蓟提取物</td>
<td>Cynara Scolymus L</td>
<td>2.5%-5% Cynarin</td>
</tr>
<tr>
<td>NAT-018</td>
<td>Astragalus Extract</td>
<td>黄芪提取物</td>
<td>Astragalus Membranaceus</td>
<td>10%-70% Polysaccharide, 10:1</td>
</tr>
<tr>
<td>NAT-024</td>
<td>Bilberry Extract</td>
<td>蓝莓提取物</td>
<td>Vaccinium vitis-idaea L</td>
<td>25% Anthocyanid; 4:1</td>
</tr>
<tr>
<td>NAT-025</td>
<td>Bitter Melon Extract</td>
<td>苦瓜提取物</td>
<td>Momordica charantia L</td>
<td>4:1 1:10 2:5:1</td>
</tr>
<tr>
<td>NAT-035</td>
<td>Cactus Extract</td>
<td>仙人掌提取物</td>
<td>Opuntia Dillenii</td>
<td>10% Polysaccharide; 20:1</td>
</tr>
<tr>
<td>NAT-045</td>
<td>Chamomile Extract</td>
<td>洋甘菊提取物</td>
<td>Matricaria Chamomila</td>
<td>8:1 10:1 25:1</td>
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<tr>
<td>NAT-051</td>
<td>Cayenne Pepper Extract</td>
<td>辣椒提取物</td>
<td>Capsicum Annuum</td>
<td>0.6%-2Capsicnin; 10:1 12:1</td>
</tr>
<tr>
<td>NAT-053</td>
<td>Green Alga Extract</td>
<td>绿藻提取物</td>
<td>Green Alga</td>
<td>1%-60% Protein</td>
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<tr>
<td>NAT-057</td>
<td>Cinnamon Bark Extract</td>
<td>肉桂皮提取物</td>
<td>Cinnamomum Japonicum Sieb</td>
<td>20: Polyphenols; 20:1</td>
</tr>
<tr>
<td>NAT-069</td>
<td>Cordyceps Extract</td>
<td>冬虫夏草提取物</td>
<td>Cordyceps Sinensis (berk.)</td>
<td>7% Cordyceps Acid; 10%-40% Polysaccharides</td>
</tr>
<tr>
<td>NAT-072</td>
<td>Cranberry Extract</td>
<td>蔓越橘提取物</td>
<td>Vaccinium Macrocarpon</td>
<td>4:1 8:1 10:1 25:1 PAC</td>
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<tr>
<td>NAT-076</td>
<td>Cyanotis Arachnoidea Extract</td>
<td>露水草提取物</td>
<td>20%-98% Ecdysterone</td>
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<tr>
<td>NAT-081</td>
<td>Dark Tea Extract</td>
<td>黑茶提取物</td>
<td>Camellia Sinesis O. Ktze</td>
<td>15%-45% Polyphenol; Catechins</td>
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<tr>
<td>NAT-086</td>
<td>Echinacea Extract</td>
<td>金鸡纳提取物</td>
<td>Echinacea Purpurea</td>
<td>4% Polyphenol; 4% Phenolic Acid</td>
</tr>
<tr>
<td>NAT-108</td>
<td>Garlic Extract</td>
<td>大蒜提取物</td>
<td>Allium Sativum L.</td>
<td>1%-2% Allicin, 2%-3% Alin, 100:1 200:1 Mucilage</td>
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<tr>
<td>NAT-115</td>
<td>Goji Extract</td>
<td>枸杞提取物</td>
<td>Lycium barbarum L.</td>
<td>20%-40% Polysaccharides</td>
</tr>
<tr>
<td>NAT-119</td>
<td>Green Coffee Bean Extract</td>
<td>绿咖啡豆提取物</td>
<td>10%-50 Chlorogenic acids</td>
<td></td>
</tr>
<tr>
<td>NAT-140</td>
<td>Lotus Leaf Extract</td>
<td>荷叶提取物</td>
<td>Nymphaeaceae</td>
<td>10%-20% Total Flavonoids; 2-10% Nucleic Acid; 90:1</td>
</tr>
<tr>
<td>NAT-150</td>
<td>Mulberry Leaf Extract</td>
<td>桑叶提取物</td>
<td>Morus Alba L.</td>
<td>1%-2% DN; 20% Total Flavonoids</td>
</tr>
<tr>
<td>NAT-171</td>
<td>Pomegranate Skin extract</td>
<td>石榴皮提取物</td>
<td>Punica granatum L.</td>
<td>40% Polyphenol; 40% Ellagic acid</td>
</tr>
<tr>
<td>NAT-177</td>
<td>Red Clover Extract</td>
<td>红豆提取物</td>
<td>trifolium Prains L.</td>
<td>2.5%-40% Sulfatodes</td>
</tr>
<tr>
<td>NAT-181</td>
<td>Rhodiola Extract</td>
<td>红景天提取物</td>
<td>Rhodiola Rosea (Prain ex Hamet)</td>
<td>3%-5% Rosavins, 5-20 Polyphenol; 3%-5% Salidroside</td>
</tr>
<tr>
<td>NAT-184</td>
<td>Rose Extract</td>
<td>玫瑰提取物</td>
<td>Rosa Rugosa</td>
<td>1%-5% Rosaceae</td>
</tr>
<tr>
<td>NAT-185</td>
<td>Rosemary Extract</td>
<td>迷迭香提取物</td>
<td>Rosmarinus Officinalis L.</td>
<td>10%-95% Carnosic acid</td>
</tr>
<tr>
<td>NAT-189</td>
<td>Saw Palmetto Berry Extract</td>
<td>锯叶棕提取物</td>
<td>Serenoa Repens</td>
<td>25%-45% Fatty acid</td>
</tr>
<tr>
<td>NAT-196</td>
<td>Spirulina Powder</td>
<td>螺旋藻提取物</td>
<td>Spirulina platensis</td>
<td>10%-60% Protein</td>
</tr>
<tr>
<td>NAT-212</td>
<td>Valerian Root Extract</td>
<td>缬草提取物</td>
<td>Valeriana Officinalis</td>
<td>4:1 2:1 10:1</td>
</tr>
<tr>
<td>NAT-220</td>
<td>White Kidney Beans Extract</td>
<td>白芸豆提取物</td>
<td>Phaseolus Vulgaris Linn</td>
<td>4:1 8:1 10:1 1% Phaseolin</td>
</tr>
<tr>
<td>NAT-233</td>
<td>Lichen Extract</td>
<td>地衣提取物</td>
<td>Parmelia saxatilis (L.) Ach</td>
<td>4:1 8:1 10:1</td>
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<tr>
<td>NAT-251</td>
<td>Flos Chrysanthemi Indici Extract</td>
<td>野菊花提取物</td>
<td>Chrysanthemum Indicum L.</td>
<td>4:1 8:1 10:1</td>
</tr>
<tr>
<td>NAT-256</td>
<td>Rose Extract</td>
<td>玫瑰花提取物</td>
<td>Rosa Rugosa</td>
<td>4:1 8:1 10:1</td>
</tr>
<tr>
<td>NAT-262</td>
<td>Konjac Extract</td>
<td>红薯提取物</td>
<td>Amorphophallus rivier Dusul</td>
<td>70%-90%</td>
</tr>
<tr>
<td>NAT-267</td>
<td>Maca Extract</td>
<td>玛卡提取物</td>
<td>Lepidium meyenii Walp</td>
<td>4:1 8:1 10:1</td>
</tr>
</tbody>
</table>

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**Product Standardization**
- Standard confirmation and production
- After-sales service and Marketing support
- Product differentiation, Patent application

**Tailored products design Flow chart**
- Plant extracts application needs
- Product cultural background
- Preliminary efficacy tests
- Extraction process route development
- Efficacy retest (Suggested Formula)
- Safety Test
- Stability test
- Pilot Trial
- Product Standardization
- Quality Standard Files; Test Method SOP; Manufacturing Process SOP; Safety and Stability Files; Application Instructions; Suggested formula

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**Strict Quality Control**
- Expertise And Technologies
- Fast And Promot Delivery
- Skilled Service Team
- Concept Development

**Application Information**
- NAT Code
- English Name
- Chinese Name
- Latin Name
- Main Spe.