Technical data sheet

1. PRODUCT IDENTIFICATION

Product Name: Epimedium Flavonoids
Botanical Name: Epimedium spp.
Common Name: Horny Goat Weed Extract
Plant Family: Berberidaceae
Plant Part Used: Leaves / Aerial Parts
CAS Number: Not applicable (botanical mixture)
Appearance: Brownish-yellow to brown fine powder
Extraction Solvent: Ethanol and Water
Specification: Total Flavonoids ≥20.0% (UV)
Country of Origin: China

2. PRODUCT DESCRIPTION

Epimedium Flavonoids are natural botanical compounds extracted from plants belonging to the Epimedium genus, commonly known as Horny Goat Weed.
The extract contains a variety of naturally occurring flavonoid glycosides, with Icariin, Epimedin A, Epimedin B and Epimedin C being among its major characteristic constituents.
Epimedium Flavonoids are obtained through extraction, concentration, purification and drying processes. The standardized extract is widely used in botanical formulations, dietary supplement development and natural ingredient research.

3. PRODUCT SPECIFICATIONS

Parameter	Specification
Total Flavonoids (UV)	≥20.0%
Icariin (HPLC)	To be confirmed
Appearance	Brownish-yellow to brown powder
Odor	Characteristic
Taste	Characteristic, slightly bitter
Identification	Positive
Particle Size	95% Pass 80 Mesh
Loss on Drying	≤5.0%
Total Ash	≤5.0%
Bulk Density	0.30–0.70 g/mL
Total Heavy Metals	≤10 ppm
Lead (Pb)	≤2.0 ppm
Arsenic (As)	≤2.0 ppm
Cadmium (Cd)	≤1.0 ppm
Mercury (Hg)	≤0.1 ppm
Total Plate Count	≤10,000 CFU/g
Yeast & Mold	≤1,000 CFU/g
E. coli	Negative
Salmonella	Negative

Note: The above values are proposed reference specifications. Actual product specifications and test methods shall be confirmed by the manufacturer.

● 4. MAIN ACTIVE CONSTITUENTS

Epimedium Flavonoids contain multiple naturally occurring flavonoid glycosides, including:

- Icariin
- Epimedin A
- Epimedin B
- Epimedin C
- Other characteristic Epimedium flavonoids

The relative proportions of individual flavonoids may vary depending on the botanical species, geographical origin, harvesting conditions and extraction process.

● 5. PHYSICOCHEMICAL PROPERTIES

Physical Form: Fine powder
Color: Brownish-yellow to brown
Odor: Characteristic botanical odor
Solubility: Partially soluble in water; solubility depends on extract composition and processing conditions.
Stability: Protect from excessive heat, moisture and direct sunlight.

● 6. APPLICATIONS

Epimedium Flavonoids are commonly used in the following applications:

Dietary Supplements

Used as a standardized botanical ingredient in herbal and nutritional supplement formulations.

Men's Health and Wellness Products

Used in botanical formulations targeting men's wellness and vitality.

Bone Health Formulations

The flavonoid constituents of Epimedium have attracted research interest in relation to bone metabolism and osteoblast activity.

Functional Botanical Products

Suitable for the development of specialized botanical blends and natural ingredient formulations.

Research and Development

Used as a botanical extract material for phytochemical analysis and research into natural flavonoid compounds.

● 7. MANUFACTURING PROCESS

Raw Material Selection → Cleaning and Preparation → Ethanol/Water Extraction → Filtration → Concentration → Purification → Drying → Sieving → Quality Inspection → Packaging.
The manufacturing process is designed to obtain a standardized Epimedium flavonoid extract with consistent quality.

● 8. QUALITY CONTROL

Quality control procedures may include:

- Total Flavonoid Content Determination.
- Icariin Content Analysis by HPLC.
- Identification Testing.
- Moisture and Ash Determination.
- Heavy Metal Analysis.
- Microbiological Testing.
- Particle Size Analysis.

A Certificate of Analysis (COA) can be provided for each production batch.

● 9. PACKAGING

Standard Packaging:

- 1 kg aluminum foil bags.
- 5 kg aluminum foil bags.
- 25 kg fiber drums with double inner PE bags.

Customized packaging is available upon request.

10. STORAGE

Store in a tightly sealed container in a cool, dry and well-ventilated place. Protect from direct sunlight, heat and moisture.

11. SHELF LIFE

24 months under recommended storage conditions in unopened original packaging.

12. TRANSPORTATION

Transport as non-dangerous goods under normal conditions. Protect the product from moisture, direct sunlight and excessive heat during transportation.

13. SUPPLIER INFORMATION

Jiangsu Khonor Chemicals Co.,Limited
Professional, Efficient and Competitive.
Jiangsu Khonor Chemicals Co.,Limited is committed to supplying quality chemical raw materials, food ingredients and nutritional ingredients to international customers.
We provide competitive sourcing, reliable quality control, professional export services and flexible packaging solutions.
*Disclaimer: This document is intended for technical reference only. Final product specifications shall be subject to the manufacturer's approved specification and Certificate of Analysis (COA).