

**MATERIAL SAFETY DATA SHEET**  
**ASTRAGALUS EXTRACT 10% ASTRAGALOSIDE IV****1. IDENTIFICATION OF SUBSTANCE**

- Product Name and Synonym: Astragalus Extract 10%HPLC Astragaloside IV
- TSCA: TSCA 8(b) inventory: No products were found.
- RTECS: Not available.
- CI#: Not available.
- Synonym: beta-D-Glucopyranoside
- CAS number(s): 84687-43-4.
- Hazardous ingredients: Not Applicable
- Chemical Name: Astragalus Extract 10%HPLC Astragaloside IV
- Chemical Formula:  $C_{41}H_{68}O_{14}$
- Manufacturer/Supplier's Name: Shaanxi Yougu Biotechnology Co., Ltd

**2. COMPOSITION/INFORMATION ON INGREDIENTS****Composition:**

Name	CAS #	% by Weight
Astragalus Extract 10%HPLC Astragaloside IV	84687-43-4	100

Toxicological Data on Ingredients: Not available.

**3. IDENTIFICATION OF THE HAZARDS**

- Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.
- Potential Chronic Health Effects:  
CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition. Specific risks: None known at this time

**4. FIRST AID MEASURES**

- First aid measures / general information: After adequate first aid, no further treatment is required unless symptoms reappear.
- Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
- Skin Contact: In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
- Serious Skin Contact:  
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.
- Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

- Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

Loosen tight clothing such as a collar, tie, belt or waistband.

- Serious Ingestion: Not available.

#### 5. FIRE AND EXPLOSION DATA

- Flammability of the Product: May be combustible at high temperature.
- Auto-Ignition Temperature: Not available.
- Flammable Limits: Not available.
- Products of Combustion: Not available.
- Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of heat.
- Explosion Hazards in Presence of Various Substances:  
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
- Fire Fighting Media and Instructions:  
SMALL FIRE: Do not use direct water stream. May spread fire; Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
- Special Remarks on Fire Hazards: Not available.
- Special Remarks on Explosion Hazards: Not available.

#### 6. ACCIDENTAL RELEASE MEASURES

- Environmental precautions: Keep out of sewers, storm drains, surface water and soil.
- Methods for cleaning up / taking up: Small spills: Cover with absorbent material, soak up and sweep into a drum. Large spills: Dike around spill and pump into suitable containers.
- Protect People: Dispose of in compliance with federal, state and local regulations. Keep unnecessary people away; isolate hazard area and deny unnecessary entry.

#### 7. HANDLING AND STORAGE

Precautions for safe handling:	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection
Conditions for safe storage: place	Keep container tightly closed in a dry and well ventilated place
Recommended storage temperature:	Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 30°C (86°F).

#### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

- Personal Protection:  
Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent.  
Gloves.
- Personal Protection in Case of a Large Spill:  
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
- Exposure Limits: Not available.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Powder

Odor: Characteristic

Odor: Not available

Taste: Not available.

Molecular Weight: Not available.

Color: Brown-Yellow.

pH (1% soln/water): Not available.

Boiling Point: Not available.

Melting Point: Not available.

Critical Temperature: Not available.

Specific Gravity: Not available.

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: Not available.

Solubility: Slightly soluble in cold water.

#### 10. STABILITY AND REACTIVITY DATA

Chemical stability:	Stable under recommended storage conditions.
Instability Temperature:	Not available
Materials to avoid:	No data available
Hazardous decomposition products:	Hazardous decomposition products formed under
Hazardous polymerization:	fire conditions - Carbon oxides

#### 11. TOXICOLOGICAL INFORMATION

- Routes of Entry: Inhalation. Ingestion.
- Toxicity to Animals: LD50: Not available. LC50: Not available.
- Chronic Effects on Humans: Not available.

- Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.
- Special Remarks on Toxicity to Animals: Not available.
- Special Remarks on Chronic Effects on Humans: Not available.
- Special Remarks on other Toxic Effects on Humans:  
 Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: Dust can cause eye irritation. Inhalation: This material is a dust or may produce dust. It may cause respiratory tract irritation. Breathing in small amounts of this material during normal industrial handling is not likely to cause harmful effects. Breathing in large amounts may be harmful. Ingestion: May cause digestive tract irritation. Swallowing small amounts during normal industrial handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. Symptoms of exposure to this material through inhalation or ingestion may include: mouth and throat irritation, scratchy feeling, and coughing.

**12. ECOLOGICAL INFORMATION**

Toxicity:	No data available
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Mobility in soil:	No data available
PBT and vPvB assessment:	No data available
Other adverse effects:	No data available

**13. DISPOSAL CONSIDERATIONS**

Product:	Do not dump into any sewers, on the ground, or into any body of water. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.
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**14. TRANSPORT INFORMATION**

DOT (US):	Not dangerous goods
IMDG:	Not dangerous goods
IATA:	Not dangerous goods

**15. REGULATORY INFORMATION**

- Emergency Overview
  - OSHA Hazards
  - No known OSHA hazards
- HMIS Classification
  - Health Hazard: 1
  - Flammability: 0
  - Physical hazards: 0
- NFPA Rating
  - Health Hazard: 1

Fire: 0

Reactivity Hazard: 0

- Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Ingestion May be harmful if swallowed.

- DSL Status

This product contains the following components that are not on the Canadian DSL nor NDSL lists.

CAS-No

Astragaloside IV

84687-43-4

- SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

- SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

- SARA 311/312 Hazards

No SARA Hazards

- Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

- Pennsylvania Right To Know Components

CAS-No. Revision Date

Astragaloside IV

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- New Jersey Right To Know Components

CAS-No. Revision Date

Astragaloside IV

84687-43-4

- California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

#### 16. DISCLAIMER

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 particular purposes. In no event shall Shaanxi Yougu Biotechnology Co., Ltd 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 Shaanxi Yougu Biotechnology Co., Ltd has been advised of the possibility of such damages.