



Product Name: (S)-Equol

CAS Number: 531-95-3

Molecular Formula: C₁₅H₁₄O₃

Molecular Weight: 242.27

Synonyms: (S)-3,4-Dihydro-3-(4-hydroxyphenyl)-2H-1-benzopyran-7-ol

1. Product Overview

(S)-Equol is a soy isoflavone metabolite produced by the intestinal conversion of daidzein, and one of the most biologically active phytoestrogens. It exhibits potent antioxidant activity and a high affinity for estrogen receptor β (ER β). As a high-purity crystalline powder, it serves as a premium active ingredient for dietary supplements, functional foods, and cosmetic applications.

2. Specification

Item	Specification
Appearance	White or off-white crystalline powder
Identification	The retention time of the major peak of the sample solution corresponds to that of the standard solution, as obtained in the assay
Purity	≥99.0%
Assay	98.0%-102.0%
Loss on Drying	≤1.0%
Optical Rotation	$[\alpha]^{20D} < -21^\circ$
Mercury (Hg)	≤1.0 mg/kg
Cadmium (Cd)	≤1.0 mg/kg
Lead (Pb)	≤1.0 mg/kg
Arsenic (As)	≤1.0 mg/kg
Total Aerobic Count (CFU/g)	≤1000
Yeast and Mold (CFU/g)	≤50
Coliforms (MPN/g)	≤0.43
Staphylococcus aureus	Not detected
Salmonella	Not detected

3. Applications

- **Food & Dietary Supplements:** Used as a raw material for soy-derived health supplements and functional foods.
- **Cosmetics:** Applied in skincare and anti-aging formulations as an active ingredient.

4. PACKAGING

1 kg per bag

Custom packaging available upon request

5. STORAGE & HANDLING

Storage: Keep in a cool, dry, and well-ventilated area, away from moisture and direct sunlight. Sealed storage.

Handling precautions: Avoid excessive heat and moisture during handling to prevent degradation.

Shelf life: 2 years under proper storage conditions.

6. SAFETY & TRANSPORT

Classification: Non-hazardous

Toxicity: Generally regarded as safe for intended use as a food/health product raw material.

Transport: Not classified as dangerous goods.