品鸿生物科技
Pinhon Biotechnology

Technical Data Sheet

PINHONBIO® Selenium Disulphide

General powder grade | TDS | Version 1.0 | 22 Oct 2026

Selenium disulphide powder standardized by its elemental selenium content for professional formulation use. This sheet gives the standing quality specification; individual batch results are reported separately in the COA.

1 Product identity

Product name	PINHONBIO® Selenium Disulphide
INCI name	SELENIUM DISULPHIDE
Synonyms	Selenium disulfide; selenium sulfide
CAS / EC number	7488-56-4 / 231-303-8
Formula / formula weight	SeS_2 / approximately 143.09 g/mol
Quality standard	PINHONBIO enterprise specification

2 Quality specification

Test item	Specification
Selenium content (as Se)	52.00–55.50%
Soluble selenium (as Se)	≤0.0005% (≤5 mg/kg)
Identification	Conforms to identification requirements
Appearance	Bright orange to reddish-brown powder
Odour	Characteristic
Residue on ignition	≤0.5%
Arsenic (As)	≤2.0 mg/kg
Lead (Pb)	≤2.0 mg/kg
Mercury (Hg)	≤1.0 mg/kg
Cadmium (Cd)	≤1.0 mg/kg
Total plate count	≤1,000 CFU/g
Yeasts and moulds	≤100 CFU/g
Diarrheogenic Escherichia coli	Not detected in 1 g
Salmonella	Not detected in 1 g

The selenium-content limit refers to elemental Se, not selenium disulphide purity. The soluble-selenium limit is a separate impurity control. Percentages are mass percentages unless otherwise specified by the laboratory procedure.

3 Composition and technical properties

Material type	Inorganic selenium–sulfur substance supplied as powder; CAS 7488-56-4 identifies selenium disulphide.
Assay basis	Elemental selenium content: 52.00–55.50%. The balance is not a separately added carrier inferred from this assay.
Water solubility	Practically insoluble in water; use a dispersion or suspension approach in aqueous formulations.
Particle size	No particle-size or micronization specification is established in the supplied product standard.

4 Applications and formulation guidance

Application: Raw material for anti-dandruff shampoo and related rinse-off scalp formulations, where permitted for the intended market and product category.

Processing: Wet and disperse the powder in a compatible formulation vehicle using enclosed or locally exhausted equipment. Evaluate particle distribution, agglomeration, settling and redispersibility in the finished formula. Do not assume that the powder dissolves in water.

Use level: Establish the finished-product concentration, labelling and regulatory category for the destination market. This raw-material specification does not set a universal dosage or claim pharmaceutical-grade certification.

5 Packaging storage and shelf life

Packaging	Double inner plastic bags in an outer neutral fibre drum. Transport packaging must meet the applicable dangerous-goods requirements.
Storage	Store tightly closed at room temperature in a cool, dry, well-ventilated place away from strong light, heat and incompatible chemicals. Restrict access.
Shelf life	24 months in original unopened packaging under the recommended storage conditions.
Transport	UN 2657, SELENIUM DISULPHIDE, Class 6.1, Packing Group II. Refer to the SDS and applicable transport requirements.
Handling	Toxic if swallowed or inhaled. Control dust, use appropriate protective equipment and prevent release into drains or waterways.

6 Supplier and references

Shaanxi Pinhon Biotechnology Co., Ltd. | Manufacturer & Supplier

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Specification basis: PINHONBIO supplied COA and confirmation of elemental selenium assay. The 52.0–55.5% Se range also appears in the USP Selenium Sulfide monograph; this does not establish compliance with the complete USP monograph. https://doi.org/10.31003/USPNF_M74820_01_01

Technical / safety references: NOAA CAMEO, Selenium Disulfide; Merck product 843845; IMO dangerous-goods entry UN 2657. https://cameochemicals.noaa.gov/chemical/4425

Version 1.0 | 22 Oct 2026. General specification; no batch-specific test results.