Safety Data Sheet (SDS) - Betulin

According to Regulation (EC) No 1907/2006 (REACH), as amended by Regulation (EU) 2020/878
Version 1.2, 23-Nov-2026

Section 1. Identification of the substance/mixture and of the company

Product name:	Betulin
Recommended uses:	Ingredient for professional cosmetic, nutraceutical, formulation and R&D use
Uses advised against:	Uses not permitted by applicable legislation; household use
Catalogue Number:	NST-03-001
Supplier:	NATURE SCIENCE TECHNOLOGIES Ltd Briezu 11, Lapsas, Latvia, LV-2107Phone: +371 24220280 Email: inquiries@nstchemicals.com Emergency: Latvian Poison Information Centre +371 67042473 (24/7)

Section 2. Hazards identification

Classification: Regulation (EC) No 1272/2008 (CLP): Acute Toxicity Category 4 - oral, dermal and inhalation.
H302 + H312 + H332: Harmful if swallowed, in contact with skin or if inhaled.

Label elements:



Pictogram: GHS07 | Signal word: Warning
Hazard statement: H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.
Precautionary statements: P261 Avoid breathing dust. P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/protective clothing/eye protection. P301+P312+P330 IF SWALLOWED: Rinse mouth and call a POISON CENTER/doctor if you feel unwell. P302+P352+P312 IF ON SKIN: Wash with plenty of water and call a POISON CENTER/doctor if you feel unwell. P304+P340+P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing; call a POISON CENTER/doctor if you feel unwell. P501 Dispose of contents/container through an approved waste disposal facility.
Other hazards: Fine airborne organic dust may cause mechanical irritation and may form a combustible dust atmosphere. Based on available information, the substance is not identified as PBT or vPvB.

Section 3. Composition/information on ingredients

Chemical name:	Betulin (>=98.0% on dry basis, HPLC)
Synonyms:	Betulinol; Betulinic alcohol; Betulol; Trochol; Lup-20(29)-ene-3beta,28-diol
Chemical formula:	C30H50O2
Molecular weight:	442.73 g/mol
CAS No:	473-98-3
EC No.	207-475-5

Section 4. First aid measures

Inhalation:	Move to fresh air and keep at rest. Call a POISON CENTER or doctor if you feel unwell.
Skin:	Remove contaminated clothing. Wash skin with soap and plenty of water. Obtain medical advice if symptoms persist.
Eyes:	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing; seek medical advice if irritation persists.
Ingestion:	Rinse mouth. Do not induce vomiting. Call a POISON CENTER or doctor if you feel unwell. Treat symptomatically.

Section 5. Firefighting measures

Extinguishing media suitable:	Water spray, alcohol-resistant foam, dry chemical powder or carbon dioxide. Avoid a direct high-pressure water jet.
Special protection of fire-fighters:	Wear self-contained breathing apparatus and full protective equipment. Combustion may produce carbon monoxide and carbon dioxide. Prevent airborne dust accumulation.

Section 6. Accidental release measures

Personal precautions:	Avoid breathing dust and contact with skin or eyes. Ensure adequate ventilation. Wear the personal protective equipment described in Section 8.
Environmental precautions:	Prevent entry into drains, surface water and soil. Avoid uncontrolled release to the environment.
Methods for cleaning up:	Collect mechanically or with a HEPA-filtered vacuum without generating dust. Place in a closed, labelled container for disposal. Wash the affected area after collection.

Section 7. Handling and storage

Handling:	Handle in a well-ventilated area. Avoid dust formation, inhalation and contact with skin, eyes and clothing. Keep away from ignition sources and strong oxidising agents.
Storage:	Store in a cool and dry place. Keep container tightly closed and protect from strong light and heat. Keep away from incompatible materials.

Section 8. Exposure controls/personal protection

Engineering measures:	No substance-specific occupational exposure limit has been established. Use closed handling or local exhaust ventilation where dust may form. Provide eyewash facilities.
Hygiene measures:	Wash hands and exposed skin after handling and before breaks. Do not eat, drink or smoke in work areas. Remove and wash contaminated clothing before reuse.
Personal protective equipment:	Respiratory protection: particulate-filter respirator suitable for the assessed dust exposure when ventilation is insufficient. Hands: chemical-resistant protective gloves, e.g. nitrile.
Skin and body:	Protective work clothing appropriate to the scale and duration of exposure.
Eyes:	Safety glasses with side shields; use chemical goggles where dust exposure is significant.

Section 9. Physical and chemical properties

Physical state:	Solid, fine powder
Colour:	Off-white to light beige
Odour:	Characteristic
Molecular Weight:	442.73 g/mol
Melting point:	Approximately 253-257 deg C (literature)
Flash point:	No data available
Boiling point:	No data available
Solubility:	Insoluble in water; limited solubility in common organic solvents
Explosive properties:	Not classified as explosive. Accumulated fine airborne dust may form an explosive dust atmosphere.

Section 10. Stability and reactivity

Stability:	Stable under recommended storage and normal handling conditions. No hazardous reactions are expected under normal use.
Materials to avoid:	Strong oxidising agents; excessive heat, strong light and conditions that generate or ignite airborne dust.
Hazardous decomposition products:	Carbon monoxide and carbon dioxide may be formed during combustion or thermal decomposition.

Section 11. Toxicological information

Acute toxicity:	Classified as Acute Toxicity Category 4 by oral, dermal and inhalation routes. Reliable quantitative LD50/ATE values are not available for the supplied material.
Skin corrosion/irritation:	Based on available data, classification criteria are not met. Dust or prolonged contact may cause mechanical irritation.
Respiratory or skin sensitisation:	Based on available data, classification criteria are not met; specific sensitisation data are limited.
CMR effects:	No component is known to meet CLP classification criteria for germ-cell mutagenicity, carcinogenicity or reproductive toxicity at the supplied concentration.
Signs and symptoms of exposure:	No specific symptoms have been conclusively established. Effects may include general discomfort following harmful acute exposure.
Potential health effects:	See the route-specific information below. Delayed effects cannot be excluded because toxicological data are limited.
Inhalation:	Harmful if inhaled. Dust may irritate the respiratory tract.
Skin:	Harmful in contact with skin. Prolonged contact may cause irritation.
Eyes:	Dust may cause mechanical eye irritation.
Ingestion:	Harmful if swallowed.
Other information:	The toxicological properties have not been fully investigated. Handle using standard precautions for chemical substances.

Section 12. Ecological information

Ecotoxicity:	No adequate aquatic toxicity data are available. Avoid release to the environment.
Persistence and degradability:	No adequate data are available. Based on available information, the substance is not identified as PBT or vPvB.
Other adverse effects:	No data are available on endocrine-disrupting properties or other adverse environmental effects for the supplied material.

Section 13. Disposal considerations

Product:	Dispose of contents through a licensed waste disposal contractor in accordance with local, regional and national requirements. Do not discharge to drains.

Contaminated packaging:	Empty completely. Dispose of contaminated packaging in accordance with applicable requirements; do not reuse unless appropriately decontaminated.

Section 14. Transport information

ADR/RID:	Not regulated as dangerous goods
IMDG:	Not regulated as dangerous goods
IATA:	Not regulated as dangerous goods

Section 15. Regulatory information

EU regulatory information:	Prepared in accordance with Regulation (EC) No 1907/2006 (REACH), Annex II, as amended by Regulation (EU) 2020/878. Classification and labelling are stated under Regulation (EC) No 1272/2008 (CLP), as amended. A chemical safety assessment has not been carried out by the supplier for this product.

Section 16. Other information

Notice to reader:	Version 1.2; revision date 23-Nov-2026. Revised to retain only general grade specifications. Approved GHS pictogram artwork was applied with corrected aspect ratio and spacing. Chemical classification and transport wording were not changed. Full hazard statement: H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled. The information is based on the product specification and safety information available at the date of issue. It is provided in good faith as guidance for safe handling, storage, transport and disposal and is not a warranty of product properties. Users are responsible for assessing suitability and complying with all applicable requirements for their intended use.