# Safety Data Sheet (SDS) - Betulinic acid

According to Regulation (EC) No 1907/2006 (REACH), as amended by Regulation (EU) 2020/878
Version 1.1, 11-Nov-2026

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

**Product name:** Betulinic acid
**Recommended uses:** Professional ingredient for formulation, manufacturing, analytical, and research and development (R&D) applications.
**Uses advised against:** Not intended for direct use by consumers as a medicinal product.
Catalogue Number: NST-10-61
Supplier: NATURE SCIENCE TECHNOLOGIES Ltd.
Briezu 11, Lapsas, Latvia, LV-2107; Phone: +371 24220280
Email: inquiries@nstchemicals.com; Website: www.nstchemicals.com
Emergency: Latvian Poison Information Centre +371 67042473 (24/7)

## Section 2. Hazards identification

**Classification:** Regulation (EC) No 1272/2008 (CLP): Not classified as hazardous based on the assessed information.
No hazard classes are assigned for the supplied product.
**Label elements:** Pictogram(s): None | Signal word: None
Hazard statements: None.
Precautionary advice: Avoid generating or breathing dust. Use adequate ventilation. Wear suitable gloves and safety glasses where exposure is possible. Wash thoroughly after handling.
Other hazards: Fine airborne organic dust may form a combustible dust atmosphere. PBT, vPvB, PMT/vPvM and endocrine-disrupting properties have not been established.

## Section 3. Composition/information on ingredients

Chemical name: Betulinic acid, ≥98.0% by HPLC (supplier specification).
Synonyms: 3beta-Hydroxy-lup-20(29)-en-28-oic acid
Chemical formula: C30H48O3
Molecular weight: 456.70 g/mol
CAS No: 472-15-1
EC No. 207-448-8

## Section 4. First aid measures

Inhalation: Move to fresh air and keep at rest. Obtain medical advice if symptoms occur or persist.
Skin: Remove contaminated clothing. Wash skin thoroughly with soap and water. Obtain medical help if irritation, burns or rash occurs or persists.
Eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing; obtain medical advice if irritation persists.
**Ingestion:** Rinse mouth. Do not induce vomiting unless directed by medical personnel. Contact a poison centre or doctor if unwell.

## 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. Carbon monoxide, carbon dioxide and irritating fumes may form during combustion or thermal decomposition. 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 & dry place, keep away from strong light and heat. Supplier specification shelf life: 2 years under recommended conditions.

## Section 8. Exposure controls/personal protection

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| 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 or a face shield where serious eye damage is classified or significant dust exposure is possible. |

## Section 9. Physical and chemical properties

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| Physical state: | Solid, fine powder |
| Colour: | White |
| Odour: | Characteristic |
| Molecular Weight: | 456.70 g/mol |
| Melting point: | No value specified in the NST quality specification |
| pH: | Absent |
| Boiling point: | No reliable product-specific data identified |
| Solubility: | No reliable product-specific quantitative data identified |
| Explosive properties: | The supplied solid is not classified as explosive or flammable. Fine airborne organic dust may form a combustible atmosphere. No reliable product-specific data were identified for boiling point, flash point, vapour pressure, density or partition coefficient. |

## Section 10. Stability and reactivity

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| Stability: | Stable under recommended storage and normal handling conditions unless otherwise indicated by the classification. No hazardous polymerisation is expected. |
| Materials to avoid: | Strong oxidising agents; excessive heat, strong light and conditions that generate or ignite airborne dust. |
| Hazardous decomposition products: | Carbon monoxide, carbon dioxide and irritating fumes may form during combustion or thermal decomposition. |

## Section 11. Toxicological information

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| Acute toxicity: | Not classified for acute toxicity based on the assessed information. Quantitative product-specific endpoint data were not identified. |
| Skin corrosion/irritation: | Not classified for skin corrosion/irritation or serious eye damage/irritation. Dust may cause transient mechanical irritation. |
| Respiratory or skin sensitisation: | Not classified for respiratory or skin sensitisation based on the assessed information. |
| CMR effects: | Available information does not support classification for germ-cell mutagenicity, carcinogenicity or reproductive toxicity; complete studies were not identified. |
| Signs and symptoms of exposure: | Dust may cause coughing or mechanical discomfort. Toxic, irritating, corrosive or allergic effects may occur where indicated by the classification. |
| Potential health effects: | No classification is assigned for specific target-organ toxicity or aspiration hazard based on the assessed information. |
| Inhalation: | Dust may cause temporary respiratory discomfort; move the exposed person to fresh air. Obtain medical help where indicated by the classification or if symptoms persist. |
| Skin: | Wash after contact. Repeated or prolonged contact may cause mild dryness or discomfort. |
| Eyes: | Dust or direct contact may cause mechanical irritation; rinse promptly and thoroughly with water. |
| Ingestion: | May cause gastrointestinal effects. Follow the immediate first-aid instructions in Section 4 and obtain medical help where indicated by the classification. |
| Other information: | Treat symptomatically. Seek prompt medical advice after significant exposure or if symptoms persist. |

## Section 12. Ecological information

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| Ecotoxicity: | Not classified as hazardous to the aquatic environment based on the assessed information. Quantitative product-specific ecotoxicity data were not identified; avoid uncontrolled release. |
| Persistence and degradability: | No reliable product-specific data were identified for degradability, bioaccumulation or mobility in soil. |
| Other adverse effects: | The product is not identified as PBT or vPvB based on available information. PMT/vPvM and endocrine-disrupting properties have not been established. |

## Section 13. Disposal considerations

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| 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

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| ADR/RID: | Not regulated as dangerous goods under ADR/RID based on the assessed classification and available transport information. |
| IMDG: | Not regulated as dangerous goods under IMDG; not identified as a marine pollutant. |
| IATA: | Not regulated as dangerous goods under IATA. |

## Section 15. Regulatory information

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| 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

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| Notice to reader: | Version 1.1; revision date 11-Nov-2026. Section 1 recommended uses and uses advised against were clarified to distinguish professional ingredient use from direct consumer use as a medicinal product; hazard classification and transport information are unchanged. Classification is based on the NST quality specification and the stated research sources: NST QS; PubChem identity; ECHA C&L notification summary. This information is guidance for safe handling and is not a warranty of product properties. |