

## Material Safety Data Sheet (MSDS)

According to regulation (EC) Nr 1907/2006  
Version 3, 01-Aug-2016

### Section 1. Chemical Identification

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Name(s): Betulinic acid  
Catalogue Number: NST-05-008  
Supplier Name: NATURE SCINCE TECHNOLOGIES Ltd  
Paula Valdena 3, Riga, Latvia, LV1048  
Phone: +(371) 24220280  
Email: [sales@clickbetulin.com](mailto:sales@clickbetulin.com)

### Section 2. Hazards identification

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Not a hazardous substance according to Regulation (EC) No 1272/2008

### Section 3. Composition/information on ingredients

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Chemical name: Betulinic acid  
Synonyms: (3 $\beta$ )-3-Hydroxylup-20(29)-en-28-oic acid  
Chemical formula: C<sub>30</sub>H<sub>48</sub>O<sub>3</sub>  
Molecular weight: 456.71 g/mol  
CAS Nr: 472-15-1

### Section 4. First Aid Measures

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Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respirator.  
If breathing is difficult, give oxygen. Get medical attention immediately.

Skin: In case of contact, immediately flush skin with plenty of water.

Eyes: 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.

### Section 5. Fire Fighting Measures

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Extinguishing media suitable: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protection of fire-fighters: Wear self contained breathing apparatus for fire fighting if necessary.

### Section 6. Accidental Release Measures

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Personal precautions: Avoid dust formation.

Environmental precautions: Do not let product enter drains.

Methods for cleaning up: Use a shovel to put the material into a convenient waste disposal container.

### Section 7. Handling And Storage

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Handling:	Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
Storage:	Keep container tightly closed. Keep container in a cool, well-ventilated area. Recommended long storage at +2 ... +8 °C.

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Section 8. Exposure Controls/Personal Protection

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Engineering measures:	Use process enclosures, local exhaust ventilation, respiratory protection.
Hygiene measures:	Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.
Personal protective equipment	
Skin and body:	Lab coat.
Eyes:	Safety glasses.

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Section 9. Physical And Chemical Properties

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Physical state:	Powder
Colour:	White
Molecular Weight:	456.71 g/mol
Melting point:	No data available
Flash point:	No data available
Boiling point:	No data available
Solubility:	No data available
Explosive properties:	Lower limit: not available Upper limit: not available

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Section 10. Stability And Reactivity

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Stability:	The product is stable under recommended storage condition.
Materials to avoid:	Strong oxidizing agents.
Hazardous decomposition products:	Carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides (NO <sub>x</sub> ).

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Section 11. Toxicological Information

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Acute toxicity:	No data available
Irritation and corrosion:	No data available
Sensitization:	No data available
Chronic exposure:	IARC: no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Signs and symptoms of exposure:	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Potential health effects:	
Inhalation:	May be harmful if inhaled. May be cause respiratory tract irritation.
Skin:	May be harmful if absorbed through skin. May be cause skin irritation.
Eyes:	May cause eye irritation.
Ingestion:	May be harmful if swallowed.

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Section 12. Ecological Information

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Ecotoxicity:	No data available
Degradability:	No data available
Further information on ecology:	No data available

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Section 13. Disposal Considerations

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Product:	Observe all federal, state and local environmental regulations.
Contaminated packaging:	Dispose of as unused product.

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Section 14. Transport Information

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

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Section 15. Regulatory Information

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Labelling according to EC Directives	Caution – substance not yet tested completely
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Section 16. Other Information

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Notice to Reader:	To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.
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\*This product is intended for research use only.\*