

Atractyloside potassium salt**Cat#: orb259135 (User Manual)****Section 1. Identification of the Substance/Mixture and of the Company/Undertaking**

1.1 Product Code: orb259135
Product Name: Atractyloside potassium salt
Synonyms: (2.beta.)-15.alpha.-hydroxy-2-[[2-O-(3-methyl-1-oxobutyl)-3,4-di-O-sulfo-.beta.-D-glucopyranosyl

1.2 Details of the Supplier of the Safety Data Sheet:

Company Name: Biorbyt
Phone: +44 (0)1223 859 353
Fax: +44 (0)1223 280 240
Email: info@biorbyt.com
Web: www.biorbyt.com

Section 2. Hazards Identification**2.1 Classification of the Substance or Mixture:****2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]:**

Acute Toxicity: Inhalation, Category 3
Acute Toxicity: Oral, Category 3
Acute Toxicity: Skin, Category 3

2.2 Label Elements:**2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]:****GHS Signal Word:** Danger**GHS Hazard Phrases:**

H331: Toxic if inhaled.

H301: Toxic if swallowed.

H311: Toxic in contact with skin.

GHS Precaution Phrases:

P261: Avoid breathing {dust/fume/gas/mist/vapours/spray}.

P264: Wash {hands} thoroughly after handling.

P280: Wear {protective gloves/protective clothing/eye protection/face protection}.

P361+364: Take off immediately all contaminated clothing and wash it before reuse.

GHS Response Phrases:

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P311: Call a {POISON CENTER/doctor/...}.

P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P330: Rinse mouth.

P302+352: IF ON SKIN: Wash with plenty of soap and water.

P312: Call a {POISON CENTER/doctor/...} if you feel unwell.

P321: Specific treatment {see ... on this label}.

GHS Storage and Disposal Phrases:

Please refer to Section 7 for Storage and Section 13 for Disposal information.

2.3 Adverse Human Health

Material may be irritating to the mucous membranes and upper respiratory tract.

Effects and Symptoms:

May cause eye, skin, or respiratory system irritation.

Toxic if inhaled.

Toxic if swallowed.

Toxic in contact with skin.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Section 3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
19-Norkaur-16-en-18-oic acid, 15-hydroxy-2-[[2-O-(3-methyl-1-oxobutyl)-3,4-di-O-sulfo-.beta.-D-glucopyranosyl]oxy]-, dipotassium	100.0 %	NA NA	Acute Tox.(O) 3: H301 Acute Tox.(D) 3: H311 Acute Tox.(I) 3: H331

Section 4. First Aid Measures

4.1 Description of First Aid No data available.

Measures:

Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.

In Case of Eye Contact:

Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

In Case of Skin Contact:

Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

In Case of Ingestion:

Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.

In Case of Inhalation:

Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Media: Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers.

Unsuitable Extinguishing Media: A solid water stream may be inefficient.

Media:

5.3 Fire Fighting Instructions:

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

Section 6. Accidental Release Measures

- | | |
|---|--|
| 6.1 Protective Precautions, Protective Equipment and Emergency Procedures: | Avoid raising and breathing dust, and provide adequate ventilation. As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves). |
| 6.2 Environmental | Take steps to avoid release into the environment, if safe to do so. |

Precautions:

6.3 Methods and Material For Containment and Cleaning Contain spill and collect, as appropriate. Transfer to a chemical waste container for disposal in accordance with local regulations.

Up:

Section 7. Handling and Storage

7.1 Precautions To Be Taken in Handling: Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid prolonged or repeated exposure.

7.2 Precautions To Be Taken in Storing: Keep container tightly closed. Store in accordance with information listed on the product insert.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

Partial Chemical Name	Britain EH40	France VL	Europe
19-Norkaur-16-en-18-oic acid, 15-hydroxy-2-[[2-O-(3-methyl-1-oxobutyl)-3,4-di-O-sulfo-.beta.-D-glucopyranosyl]oxy]-, dipotassium	No data.	No data.	No data.
Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
19-Norkaur-16-en-18-oic acid, 15-hydroxy-2-[[2-O-(3-methyl-1-oxobutyl)-3,4-di-O-sulfo-.beta.-D-glucopyranosyl]oxy]-, dipotassium	No data.	No data.	No data.

8.2 Exposure Controls (Ventilation etc.): Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

8.2.2 Personal protection equipment:

Eye Protection: Safety glasses
Protective Gloves: Compatible chemical-resistant gloves
Other Protective Clothing: Lab coat
Respiratory Equipment (Specify Type): NIOSH approved respirator, as conditions warrant.
Work/Hygienic/Maintenance Practices: Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower.

Wash thoroughly after handling.

Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical States: Gas Liquid Solid

Appearance and Odor: A crystalline solid

Solubility in Water: ~ 10 mg/ml

9.2 Other Information

Molecular Formula & Weight: C₃₀H₄₄O₁₆S₂ · 2K 803.0

Section 10. Stability and Reactivity

10.1 **Reactivity:** No data available.

10.2 **Stability:** Unstable Stable

10.3 **Stability Note(s):** Stable if stored in accordance with information listed on the product insert.

Polymerization: Will occur Will not occur

Section 11. Toxicological Information

11.1 **Information on** The toxicological effects of this product have not been thoroughly studied.

Toxicological Effects:

Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
19-Norkaur-16-en-18-oic acid, 15-hydroxy-2-[[2-O-(3-methyl-1-oxobutyl)-3,4-di-O-sulfo-.beta .D-glucopyranosyl]oxy]-, dipotassium	n.a.	n.a.	n.a.	n.a.

Section 12. Ecological Information

12.1 **Toxicity:** Avoid release into the environment.

Runoff from fire control or dilution water may cause pollution.

Section 13. Disposal Considerations

13.1 **Waste Disposal Method:** Dispose in accordance with local, state, and federal regulations.

Section 14. Transport Information

14.1 **LAND TRANSPORT (US DOT):**

DOT Proper Shipping Name: Not dangerous goods.
DOT Hazard Class:
UN/NA Number:
14.1 LAND TRANSPORT (European ADR/RID):
ADR/RID Shipping Name: Not dangerous goods.
UN Number:
Hazard Class:
14.3 AIR TRANSPORT (ICAO/IATA):
ICAO/IATA Shipping Name: Not dangerous goods.
Additional Transport Information: Transport in accordance with local, state, and federal regulations.

Section 15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
19-Norkaur-16-en-18-oic acid, 15-hydroxy-2-[[2-O-(3-methyl-1-oxobutyl)-3,4-di-O -sulfo-.beta.-D-glucoopyranosyl]oxy]-, dipotassium	No	No	No

Hazardous Components (Chemical Name)	Other US EPA or State Lists
19-Norkaur-16-en-18-oic acid, 15-hydroxy-2-[[2-O-(3-methyl-1-oxobutyl)-3,4-di-O -sulfo-.beta.-D-glucoopyranosyl]oxy]-, dipotassium	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No

Regulatory Information

This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC)

Statement: No.1272/2008.