

This safety data sheet was created pursuant to the requirements of:
US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS
2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous
Products Regulation (HPR)

Issuing Date 10-May-2021

Revision Date 10-May-2021

Revision Number 1

1. Identification

Product identifier

Product Name BioEstolide 250

Other means of identification

Product Code(s) BioEstolide 250

Synonyms Octadecanoic acid, 12-hydroxy-, homopolymer, 2-ethylhexyl ester, acetate

Recommended use of the chemical and restrictions on use

Recommended use Base oil

Restrictions on use For professional use only. For industrial use only.

Details of the supplier of the safety data sheet

Supplier Address

Biosynthetic Technologies
6320 Intech Way
Indianapolis, IN 46278
+1 317-556-1050

E-mail info@biosynthetic.com

Emergency telephone number

Emergency telephone +1 317-556-1050 (M-F 8a-5p)

2. Hazard(s) identification

Classification

This product is not considered hazardous by either the US 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) or the Canadian Workplace Hazardous Material Information System (WHMIS 2015)

Label elements

Hazard statements

Not classified.

Other information

No information available.

3. Composition/information on ingredients**Substance****Synonyms**

Octadecanoic acid, 12-hydroxy-, homopolymer, 2-ethylhexyl ester, acetate

| Chemical name | CAS No | Weight-% | Hazardous Material Information Review Act registry number (HMIRA registry #) | Date HMIRA filed and date exemption granted (if applicable) |
|--|--------------|----------|--|---|
| Octadecanoic acid, 12-hydroxy-, homopolymer, 2-ethylhexyl ester, acetate | 2361055-93-6 | 100 | - | - |

4. First-aid measures**Description of first aid measures****Inhalation**

Remove to fresh air.

Eye contact

Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if symptoms occur.

Skin contact

Wash skin with soap and water. Get medical attention if symptoms occur.

Ingestion

Clean mouth with water. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed**Symptoms**

None known.

Indication of any immediate medical attention and special treatment needed**Note to physicians**

Treat symptomatically.

5. Fire-fighting measures**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

None known based on information supplied.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Hazardous combustion products

Carbon oxides.

Explosion data**Sensitivity to mechanical impact** None.**Sensitivity to static discharge** None.

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid contact with eyes.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes. Use personal protection equipment. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep/store only in original container. Keep in properly labeled containers. Store in accordance with local regulations. Protect from direct sunlight. Keep away from food, drink and animal feeding stuffs.

8. Exposure controls/personal protection

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required. If splashes are likely to occur, wear safety glasses with side-shields.

Hand protection No special protective equipment required.

Skin and body protection No special protective equipment required.

| | |
|---------------------------------------|--|
| Respiratory protection | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| General hygiene considerations | Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Wash hands and face before breaks and immediately after handling the product. |

9. Physical and chemical properties

Information on basic physical and chemical properties

| | |
|-----------------------|---------------------------------|
| Appearance | Light yellow transparent liquid |
| Physical state | Liquid |
| Color | Light yellow |
| Odor | No information available |
| Odor threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|---------------------|-------------------------|
| pH | | No data available |
| Melting point / freezing point | | No data available |
| Initial boiling point and boiling range | | No data available |
| Flash point | > 260 °C / > 500 °F | Open cup |
| Evaporation rate | | No data available |
| Flammability | | No data available |
| Flammability Limit in Air | | |
| Upper flammability or explosive limits | | No data available |
| Lower flammability or explosive limits | | No data available |
| Vapor pressure | | No data available |
| Vapor density | | No data available |
| Relative density | 0.92 | |
| Water solubility | | No data available |
| Solubility(ies) | | No data available |
| Partition coefficient | | No data available |
| Autoignition temperature | | No data available |
| Decomposition temperature | | No data available |
| Kinematic viscosity | 150 cSt @40°C | |
| Dynamic viscosity | | No data available |

Other information

| | |
|-----------------------------|---------------------------|
| Explosive properties | No information available. |
| Oxidizing properties | No information available. |
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | No information available |
| Liquid Density | No information available |
| Bulk density | No information available |

10. Stability and reactivity

| | |
|---|-----------------------------------|
| Reactivity | None under normal use conditions. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |

Conditions to avoid None known based on information supplied.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

| | |
|---------------------|---|
| Inhalation | Specific test data for the substance or mixture is not available. |
| Eye contact | Specific test data for the substance or mixture is not available. Contact with eyes may cause irritation. |
| Skin contact | Specific test data for the substance or mixture is not available. |
| Ingestion | Specific test data for the substance or mixture is not available. |

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms None known.

Acute toxicity

Numerical measures of toxicity

Based on available data, the classification criteria are not met

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|---------------------------|
| Skin corrosion/irritation | No information available. |
| Serious eye damage/eye irritation | No information available. |
| Respiratory or skin sensitization | No information available. |
| Germ cell mutagenicity | No information available. |
| Carcinogenicity | No information available. |
| Reproductive toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Aspiration hazard | No information available. |

12. Ecological information

Ecotoxicity The environmental impact of this product has not been fully investigated.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|-----------------------------|-----------------------------|----------------------------|--------------------------------------|
| Octadecanoic acid, 12-hydroxy-, homopolymer, 2-ethylhexyl | EC50: >1000mg/L (72h, Alga) | LC50: >1000mg/L (96h, Fish) | - | EC50: >1000mg/L (48h, Daphnia magna) |

| | | | | |
|--------------------------------|--|--|--|--|
| ester, acetate 2361055-93-6 | | | | |
|--------------------------------|--|--|--|--|

Persistence and degradability No information available.

Bioaccumulation No information available.

Mobility in soil No information available.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations, Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG Not regulated

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

Contact supplier for inventory compliance status

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

| | | | | |
|--------------------|-------------------------|-----------------------|---------------------------|------------------------------|
| <u>NFPA</u> | Health hazards 0 | Flammability 1 | Instability 0 | Special hazards - |
| <u>HMIS</u> | Health hazards 0 | Flammability 1 | Physical hazards 0 | Personal protection X |

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |

Key literature references and sources for data used to compile the SDS

- U.S. Environmental Protection Agency ChemView Database
- European Food Safety Authority (EFSA)
- EPA (Environmental Protection Agency)
- Acute Exposure Guideline Level(s) (AEGl(s))
- U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
- U.S. Environmental Protection Agency High Production Volume Chemicals
- Food Research Journal
- Hazardous Substance Database
- International Uniform Chemical Information Database (IUCLID)
- Japan GHS Classification
- Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
- NIOSH (National Institute for Occupational Safety and Health)
- National Library of Medicine's ChemID Plus (NLM CIP)
- National Toxicology Program (NTP)
- New Zealand's Chemical Classification and Information Database (CCID)
- Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
- Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet