

SAFETY DATA SHEET

Creation Date 01-Apr-2014

Revision Date 28-Dec-2021

Revision Number 6

1. Identification

Product Name

Oleanolic acid

Cat No. :

AC456120000; AC456120050; AC456120250

CAS No Synonyms 508-02-1 No information available

Recommended Use Uses advised against

Laboratory chemicals. Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

<u>Company</u>

Fisher Scientific Company One Reagent Lane Fair Lawn, NJ 07410 Tel: (201) 796-7100 Acros Organics One Reagent Lane Fair Lawn, NJ 07410

Emergency Telephone Number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11 Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99 **CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Specific target organ toxicity (single exposure) Target Organs - Respiratory system. Category 2 Category 2 Category 3

Label Elements

Signal Word Warning

Hazard Statements Causes skin irritation Causes serious eye irritation May cause respiratory irritation



Precautionary Statements Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Inhalation

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

Call a POISON CENTER or doctor/physician if you feel unwell

Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Eves

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

3. Composition/Information on Ingredients

| Component | | CAS No | Weight % | | |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------------------|----------|--|--|
| Olean-12-en-28-oic acid, 3-hydrox | y-, (3.beta.)- | 508-02-1 | >95 | | |
| | | | | | |
| | 4. | First-aid measures | | | |
| General Advice | If symptoms | persist, call a physician. | | | |
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. | | | | |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. | | | | |
| Inhalation | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. | | | | |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur. | | | | |
| Most important symptoms and effects | None reasonably foreseeable. | | | | |

Notes to Physician

Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

| Unsuitable Extinguishing Media | No information available |
|----------------------------------------------|--------------------------|
| Flash Point | No information available |
| Method - | No information available |
| Autoignition Temperature Explosion Limits | Not applicable |
| Upper | No data available |
| Lower | No data available |

Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO₂).

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

| <u>NFPA</u> | Health 2 | Flammability | Instability 0 | Physical hazards N/A | | | | | |
|---------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|--------------------------------|--|--|--|--|--|
| | | | - | | | | | | |
| | | 6. Accidental re | lease measures | | | | | | |
| Personal | Precautions | Use personal protective ec formation. | Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation. | | | | | | |
| Environm | ental Precautions | Should not be released int Information. | o the environment. See Section | n 12 for additional Ecological | | | | | |
| Methods Up | for Containment and C | lean Sweep up and shovel into containers for disposal. | suitable containers for disposa | I. Keep in suitable, closed | | | | | |
| | | 7. Handling | and storage | | | | | | |
| Handling | | Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation. | | | | | | | |
| Storage. | | Keep container tightly clos Incompatible Materials. S | ed in a dry and well-ventilated trong oxidizing agents. | place. Keep refrigerated. | | | | | |
| | 8. | Exposure controls | / personal protecti | on | | | | | |
| Exposure | Guidelines | | tain any hazardous materials w gion specific regulatory bodies. | | | | | | |
| Engineeri | ng Measures | Ensure that eyewash stations and safety showers are close to the workstation location Ensure adequate ventilation, especially in confined areas. | | | | | | | |
| Personal | Protective Equipment | | | | | | | | |

| Eye/face Protection | Tight sealing safety goggles. |
|-------------------------------|---------------------------------------------------------------------------|
| Skin and body protection | Wear appropriate protective gloves and clothing to prevent skin exposure. |
| Respiratory Protection | No protective equipment is needed under normal use conditions. |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. |

9. Physical and chemical properties

| | <u> </u> |
|----------------------------------------|----------|
| Physical State | |
| Appearance | |
| Odor | |
| Odor Threshold | |
| рН | |
| Melting Point/Range | |
| Boiling Point/Range | |
| Flash Point | |
| Evaporation Rate | |
| Flammability (solid,gas) | |
| Flammability or explosive limits | |
| Upper | |
| Lower | |
| Vapor Pressure | |
| Vapor Density | |
| Specific Gravity | |
| Solubility | |
| Partition coefficient; n-octanol/water | |
| Autoignition Temperature | |
| Decomposition Temperature | |
| Viscosity | |
| Molecular Formula | |
| Molecular Weight | |
| | |

Powder Solid White No information available No information available No information available > 300 °C / > 572 °F No information available No information available Not applicable No information available No data available No data available No information available Not applicable No information available No information available No data available Not applicable

No information available

Not applicable C30 H48 O3

456.7 10. Stability and reactivity

| Reactive Hazard | None known, based on information available | | |
|-----------------------------------------------------------------------------|-----------------------------------------------------------|--|--|
| Stability | Stable under normal conditions. | | |
| Conditions to Avoid | Incompatible products. Excess heat. Avoid dust formation. | | |
| Incompatible Materials | Strong oxidizing agents | | |
| Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2) | | | |
| Hazardous Polymerization | Hazardous polymerization does not occur. | | |
| Hazardous Reactions | None under normal processing. | | |
| | | | |

11. Toxicological information

Acute Toxicity

Product Information

| Component Information | | | |
|-----------------------------|--------------------------|-------------|-----------------|
| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
| Olean-12-en-28-oic acid, | >2 g/kg (Rat) | Not listed | Not listed |
| 3-hydroxy-, (3.beta.)- | | | |
| Toxicologically Synergistic | No information available | | |

Products Delayed and immediate effects as well as chronic effects from short and long-term exposure Irritating to eyes, respiratory system and skin Irritation Sensitization No information available Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. Component CAS No IARC NTP ACGIH OSHA Mexico Olean-12-en-28-oic 508-02-1 Not listed Not listed Not listed Not listed Not listed acid, 3-hydroxy-, (3.beta.)-No information available **Mutagenic Effects** No information available. **Reproductive Effects Developmental Effects** No information available. No information available. Teratogenicity STOT - single exposure Respiratory system None known **STOT - repeated exposure** Aspiration hazard No information available Symptoms / effects, both acute and No information available delayed **Endocrine Disruptor Information** No information available **Other Adverse Effects** The toxicological properties have not been fully investigated. 12. Ecological information **Ecotoxicity** Do not empty into drains. No information available Persistence and Degradability **Bioaccumulation/Accumulation** No information available. No information available. Mobility 13. Disposal considerations Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification. 14. Transport information DOT Not regulated Not regulated TDG Not regulated ΙΑΤΑ IMDG/IMO Not regulated 15. Regulatory information United States of America Inventory

| | | | Active-Inactive | Flags |
|--------------------------|----------|---|-----------------|-------|
| Olean-12-en-28-oic acid, | 508-02-1 | Х | ACTIVE | - |
| 3-hydroxy-, (3.beta.)- | | | | |

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710) X - Listed '-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|--------------------------|----------|-----|------|-----------|-------|------|------|------|-------|------|
| Olean-12-en-28-oic acid, | 508-02-1 | - | Х | 208-081-6 | - | - | Х | Х | - | - |
| 3-hydroxy-, (3.beta.)- | | | | | | | | | | |

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

U.S. Federal Regulations

| SARA 313 | Not applicable |
|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| SARA 311/312 Hazard Categories | See section 2 for more information |
| CWA (Clean Water Act) | Not applicable |
| Clean Air Act | Not applicable |
| OSHA - Occupational Safety and Health Administration | Not applicable |
| CERCLA | Not applicable |
| California Proposition 65 | This product does not contain any Proposition 65 chemicals. |
| U.S. State Right-to-Know Regulations | Not applicable |
| U.S. Department of Transportation Reportable Quantity (RQ): DOT Marine Pollutant DOT Severe Marine Pollutant | N N N |
| U.S. Department of Homeland Security | This product does not contain any DHS chemicals. |
| Other International Regulations | |
| Mexico - Grade | No information available |
| Authorisation/Restrictions accordin | ng to EU REACH |

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

| Component | CAS No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|----------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------------|
| Olean-12-en-28-oic acid, 3-hydroxy-, (3.beta.)- | 508-02-1 | Not applicable | Not applicable | Not applicable | Not applicable |
| · · · · · · · · · · · · · · · · · · · | | - | | | |
| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
| Olean-12-en-28-oic acid, 3-hydroxy-, (3.beta.)- | 508-02-1 | Not applicable | Not applicable | Not applicable | Not applicable |

| | 16. Other information |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prepared By | Regulatory Affairs |
| | Thermo Fisher Scientific |
| | Email: EMSDS.RA@thermofisher.com |
| Creation Date | 01-Apr-2014 |
| Revision Date | 28-Dec-2021 |
| Print Date | 28-Dec-2021 |
| Revision Summary | This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). |

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 SDS