SAFETY DATA SHEET

Revision Date 07/12/2023

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name	: FloraChol™ Synthetic Cholesterol, 99%
Product Number	: A0190003
Brand	: Advanced ChemTech
CAS-No.	: 57-88-5

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company	: Advanced ChemTech 5609 Fern Valley Rd, Louisville, KY 40228 USA
Telephone	: +1 800-456-1403
Fax	: +1 502-968-1000

1.4 Emergency telephone number : +1 800-424-9300 Chemtrec

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture: Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements: No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS – none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms:	: 5-Cholesten-3β-ol; 3β-Hydroxy-5-cholestene
Formula	: $C_{27}H_{46}O$
Molecular Weight	: 386.65 g/mole
CAS-No.	: 57-88-5
EC-No.	: 200-353-2

No components need to be disclosed according to the applicable regulations.

4. FIRST AID MEASURES

4.1 Description of first aid measures

If inhaled: After inhalation: fresh air

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact: After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed: After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed: No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Water Foam, Carbon dioxide (CO2), Dry powder

5.2 Special hazards arising from the substance or mixture: Carbon oxides, Combustible. Development of hazardous combustion gases or vapors possible in the event of fire.

5.3 Advice for firefighters: In the event of fire, wear self-contained breathing apparatus.

5.4 Further information: Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, protective equipment, and emergency procedure: Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2 Environmental precautions: Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up: Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections: For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling: For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities: Tightly closed. Dry.

Storage stability: Recommended storage temperature -20 °C

Keep container closed when not in use. Protect from direct sunlight.

Storage class: Storage class (TRGS 510): 11: Combustible Solids

7.3 Specific end use(s): Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters: Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls: Change contaminated clothing. Wash hands after working with substance.

Personal protective equipment

Eye/face protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: KCL 741 Dermatril® L

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: KCL 741 Dermatril® L

Respiratory protection required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.
Control of environmental exposure Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance	Form: White to Off-White Solid
b) Odor	no data available
c) Odor Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	Melting point/range: 147 - 149 °C (297 - 300 °F)
f) Initial boiling point and boiling range	360 °C (680 °F)
g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapor pressure	< 0.01 hPa at 20 °C (68 °F) - OECD Test Guideline 104
l) Vapor density	no data available
m) Relative density	no data available
n) Water solubility	0.00003 g/l at 20 °C (68 °F) - OECD Test Guideline 105 - insoluble
o) Partition coefficient: n- octanol/water	log Pow: > 6.5 at 20 °C (68 °F) - OECD Test Guideline 117 - Potential bioaccumulation
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties	no data available
t) Oxidizing properties	no data available

9.2 Other safety information: no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity: The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
10.2 Chemical stability: The product is chemically stable under standard ambient conditions (room temperature) .
10.3 Possibility of hazardous reactions: Violent reactions possible with: Strong oxidizing agents
10.4 Conditions to avoid: No data available
10.5 Incompatible materials: Strong oxidizing agents
10.6 Hazardous decomposition products: In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:
Acute toxicity estimate Oral - 2,500 mg/kg (Calculation method)
LD50 Oral - Rat - male and female - > 2,000 mg/kg (OECD Test Guideline 401)
Inhalation: No data available
Acute toxicity estimate Dermal - 2,500 mg/kg (Calculation method)
LD50 Dermal - Rat - male and female - > 2,000 mg/kg (OECD Test Guideline 402)
Remarks: Limit Test
Skin corrosion/irritation: Skin - EPISKIN Human Skin Model Test Result: No skin irritation (OECD Test Guideline 439)
Serious eye damage/eye irritation: Eyes - Rabbit Result: No eye irritation - 24 h (OECD Test Guideline 405)
Respiratory or skin sensitization: Local lymph node assay (LLNA) - Mouse Result: negative (OECD Test Guideline 429)
Germ cell mutagenicity:
Test Type: Ames test
Test system: Escherichia coli/Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Result: negative
Remarks: (ECHA)
Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Result: negative
Remarks: (ECHA)
Carcinogenicity:

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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: No data available

Specific target organ toxicity - single exposure: No data available

Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: No data available

11.2 **Additional Information:** RTECS: FZ8400000. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. No toxic effects are to be expected when the product is handled appropriately. Substance which occurs in the human body under physiological conditions. Handle in accordance with good industrial hygiene and safety practice.

12. ECOLOGICAL INFORMATION

12.1 **Toxicity:** No data available

12.2 **Persistence and degradability:** Biodegradability: aerobic - Exposure time 28 d; Result: 74 % - Readily biodegradable. (OECD Test Guideline 302C); Biochemical Oxygen: 830 mg/g; Demand (BOD)

12.3 **Bioaccumulative potential:** No data available

12.4 **Mobility in soil:** No data available

12.5 **Results of PBT and vPvB assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 **Endocrine disrupting properties:** No data available

12.7 **Other adverse effects:** No data available

13. DISPOSAL CONSIDERATIONS

13.1 **Waste treatment methods**

Product: Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

14. TRANSPORT INFORMATION

DOT (US) Not dangerous goods

IMDG Not dangerous goods

IATA Not dangerous goods

Further information Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

SARA 302 Components: This material does not contain any components with a section 302 EHS TPQ.

SARA 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards: No SARA Hazards

Massachusetts Right to Know Components: No components are subject to the Massachusetts Right to Know Act.

16. OTHER INFORMATION

HMIS Rating

Health hazard:	0
Chronic Health Hazard:	
Flammability:	0
Physical Hazard	0

NFPA Rating

Health hazard:	0
Fire Hazard:	0
Reactivity Hazard:	0

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Reagents, LLC. shall not be liable for any damage resulting in the handling or from contact with the above product.