

Safety Data Sheet acc. to OSHA HCS

Date of issue: 04/09/2026

Revision date 04/09/2026

1 Identification

- **Product identifier**
- **Trade name:** Cayman LipiDOT Strips™ - Sphingolipids
- **Other means of identification**
- **Article number:** 45290
- **Application of the substance / the mixture**
This product is for research use - Not for human or veterinary diagnostic or therapeutic use.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Cayman Chemical Co.
1180 E. Ellsworth Rd.
Ann Arbor, MI 48108
USA
- **Information department:** Product safety department
- **Emergency telephone number:**
During normal opening times: +1 (734) 971-3335
US/CANADA: 800-424-9300
Outside US/CANADA: 703-741-5970

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carcinogenicity 1B H350 May cause cancer.

-
- **Label elements**
 - **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
 - **Hazard pictograms**



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**
nitrocellulose membrane
- **Hazard statements**
H350 May cause cancer.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/09/2026

Revision date 04/09/2026

Trade name: Cayman LipiDOT Strips™ - Sphingolipids

(Contd. from page 1)

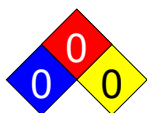
Precautionary statements

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Information pertaining to particular dangers for man and environment:

Classification system:

NFPA ratings (scale 0 - 4)



Health = 0
Fire = 0
Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = *0
Fire = 0
Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Classification according to (d)(1)(ii) of § 1910.1200

The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.

Hazards not otherwise classified

There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

9004-70-0	nitrocellulose membrane	99.9978%
-----------	-------------------------	----------

Other ingredients

CAS: 4682-48-8 RTECS: FK1000000	Lactosylceramide (bovine buttermilk)	0.0001%
CAS: 11034-93-8	Globotetraosylceramide (porcine RBC)	0.0001%
CAS: 12707-58-3	Ganglioside GD1a (bovine) (ammonium salt)	0.0001%
CAS: 19553-76-5	Ganglioside GD1b	0.0001%
CAS: 19600-01-2	Ganglioside GM2 Mixture (bovine brain) (ammonium salt)	0.0001%
CAS: 26993-30-6 RTECS: RG2260500	Sphingosine-1-phosphate (d18:1)	0.0001%
CAS: 34324-89-5	C16 Galactosylceramide (d18:1/16:0)	0.0001%
CAS: 54827-14-4	Ganglioside GM3 (bovine brain) (sodium salt)	0.0001%

(Contd. on page 3)

US

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/09/2026

Revision date 04/09/2026

Trade name: Cayman LipiDOT Strips™ - Sphingolipids

(Contd. from page 2)

CAS: 59247-13-1 RTECS: FK1500000	Ganglioside GT1b (porcine) (ammonium salt)	0.0001%
CAS: 62010-37-1	Ganglioside GD3 (bovine buttermilk) (ammonium salt)	0.0001%
CAS: 68652-37-9	Ganglioside GQ1b (bovine) (ammonium salt)	0.0001%
CAS: 69345-49-9	N-glycolyl-Ganglioside GM3 Mixture (ammonium salt)	0.0001%
CAS: 71012-19-6	Asialo Ganglioside GM1	0.0001%
CAS: 71965-57-6	Globotriaosylceramide (porcine RBC)	0.0001%
CAS: 100403-19-8	Ceramides Mixture	0.0001%
CAS: 119242-44-3	C22 Glucosylceramide (d18:1/22:0)	0.0001%
CAS: 158021-47-7 RTECS: ML3205000	KRN 7000	0.0001%
CAS: 475662-40-9	Sphingomyelin (bovine buttermilk)	0.0001%
CAS: 1007119-81-4	Ganglioside GM1 (porcine) (ammonium salt)	0.0001%
	Sulfatide (bovine) (sodium salt)	0.0001%
	Ganglioside GM4 (chicken egg) (ammonium salt)	0.0001%
	Ganglioside GD2 (bovine buttermilk) (ammonium salt)	0.0001%

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
Use fire fighting measures that suit the environment.
A solid water stream may be inefficient.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.

(Contd. on page 4)

US

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/09/2026

Revision date 04/09/2026

Trade name: Cayman LipiDOT Strips™ - Sphingolipids

(Contd. from page 3)

· Protective Action Criteria for Chemicals

· PAC-1:

None of the ingredients is listed.

· PAC-2:

None of the ingredients is listed.

· PAC-3:

None of the ingredients is listed.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

· Information about protection against explosions and fires:

Keep respiratory protective device available.

· Conditions for safe storage, including any incompatibilities

· **Storage:** Store in accordance with information listed on the product insert.

· **Requirements to be met by storerooms and receptacles:** No special requirements.

· **Information about storage in one common storage facility:** Not required.

· **Further information about storage conditions:** Keep receptacle tightly sealed.

· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· Control parameters

· Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **Additional information:** The lists that were valid during the creation were used as basis.

· Exposure controls

· **Appropriate engineering controls** No further data; see section 7.

· Personal protective equipment:

· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/09/2026

Revision date 04/09/2026

Trade name: Cayman LipiDOT Strips™ - Sphingolipids

(Contd. from page 4)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Physical state**

Liquid

- **Color:**

According to product specification

- **Odor:**

Characteristic

- **Storage Buffer**

- **Odor threshold:**

Not determined.

- **Formulation**

- **Melting point/Melting range:**

Undetermined.

- **Boiling point/Boiling range:**

Undetermined.

- **Flammability:**

Not applicable.

- **Explosion limits:**

- **Lower:**

Not determined.

- **Upper:**

Not determined.

- **Flash point:**

Not applicable.

- **Decomposition temperature:**

Not determined.

- **pH-value:**

Not determined.

- **Viscosity:**

- **Kinematic:**

Not determined.

- **SOLUBILITY**

- **Dynamic:**

Not determined.

- **Solubility in / Miscibility with**

- **Water:**

Not miscible or difficult to mix.

- **Partition coefficient (n-octanol/water):**

Not determined.

- **Vapor pressure:**

Not determined.

- **Vapor pressure:**

- **Density:**

Not determined.

- **Relative density**

Not determined.

- **Vapor density**

Not determined.

- **Particle characteristics**

Not applicable.

(Contd. on page 6)

US

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/09/2026

Revision date 04/09/2026

Trade name: Cayman LipiDOT Strips™ - Sphingolipids

(Contd. from page 5)

- **Other information**
- **Appearance:**
- **Form:** Fluid
- **Important information on protection of health and environment, and on safety.**
- **Ignition temperature:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Solvent content:**
- **VOC content:** 0.00 %
0.0 g/l / 0.00 lb/gal
- **Change in condition**
- **Evaporation rate** Not determined.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
- **Interactive effects** No interactive effects between components are known.
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)**
None of the ingredients is listed.
- **NTP (National Toxicology Program)**
None of the ingredients is listed.
- **OSHA-Ca (Occupational Safety & Health Administration)**
None of the ingredients is listed.
- **Alternative sources for toxicological information**
No non-standard sources for toxicological information where used.

US

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/09/2026

Revision date 04/09/2026

Trade name: Cayman LipiDOT Strips™ - Sphingolipids

(Contd. from page 6)

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects**
- **Additional ecological information:**
- **General notes:**
 Water hazard class 3 (Self-assessment): extremely hazardous for water
 Do not allow product to reach ground water, water course or sewage system, even in small quantities.
 Danger to drinking water if even extremely small quantities leak into the ground.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|--|---|
| · UN-Number | |
| · DOT, IMDG, IATA | not regulated |
| · UN proper shipping name | |
| · DOT, IMDG, IATA | not regulated |
| · Transport hazard class(es) | |
| · DOT, ADN, IMDG, IATA | |
| · Class | not regulated |
| · Packing group | |
| · DOT, IMDG, IATA | not regulated |
| · Environmental hazards: | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | |
| · IATA | |
| · Remarks: | When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10.
Therefore packaging does not have to be labeled as |

(Contd. on page 8)

US

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/09/2026

Revision date 04/09/2026

Trade name: Cayman LipiDOT Strips™ - Sphingolipids

(Contd. from page 7)

·	Dangerous Goods/Excepted Quantity.
· Special precautions for user	Not applicable.
· UN "Model Regulation":	not regulated

15 Regulatory information

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

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

9004-70-0 nitrocellulose membrane

ACTIVE

- **Hazardous Air Pollutants**

None of the ingredients is listed.

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **National regulations:**

- **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

- **Department issuing SDS:** Environment protection department.
- **Contact:** -
- **Date of previous version** 04/09/2026
- **Date of preparation** 04/09/2026

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Date of issue: 04/09/2026

Revision date 04/09/2026

Trade name: Cayman LipiDOT Strips™ - Sphingolipids

(Contd. from page 8)

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Carcinogenicity 1B: Carcinogenicity – Category 1B

· * Data compared to the previous version altered.

US