C-12 NBD Ceramide: sc-205232

MATERIAL SAFETY DATA SHEET

The Power to Question

1. Product and Company Identification

Product Name: C-12 NBD Ceramide
Catalog Number: sc-205232
Supplier: Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, California 95060
800.457.3801 or 831.457.3800

Emergency:
ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255
(1-800-CHEMCALL) or call +613 9573 3112

Chemical Family: Inihibitors
Synonyms: 2-[[12-[(7-nitro-2,1,3-benzoxadiazol-4-yl)amino]dodecyl]amino]-4 -octadecene-1,3-diol; N-C12-NBD-D-erythro-Sphingosine

2. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Percentage	OSHA TWA	ACGIH TLV	Other Limits
1. C-12 NBD Ceramide	202850-01-9	1.0 %	No data.	No data.	No data.
2. Chloroform	67-66-3	99.0 %	No data.	10 ppm	No data.
Hazardous Components (Chemical Name)	**RTECS #**	**OSHA STEL**	**OSHA CEIL**	**ACGIH STEL**	**ACGIH CEIL**
1. C-12 NBD Ceramide	NA	No data.	No data.	No data.	No data.
2. Chloroform	FS9100000	No data.	50 ppm	No data.	No data.

3. Hazards Identification

Emergency Overview: No data available.

Route(s) of Entry: Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection

Potential Health Effects (Acute and Chronic): The hazards identified with this product are those associated with the solvent(s).
California Prop. 65 carcinogen.
Causes eye, skin, or respiratory system irritation.
Material may be irritating to the mucous membranes and upper respiratory tract.
May be fatal by inhalation, ingestion, or skin absorption.
May cause cancer.
Prolonged or repeated exposure to vapors may cause damage to the nervous system, the heart and the liver and kidneys.
The toxicological properties of this compound have not been fully evaluated.

LD 50/LC 50: Please refer to Section 11.

Signs and Symptoms Of Exposure: Inhalation - Acts as a relatively potent anesthetic. Irritates respiratory tract and causes central nervous system effects, including headache, drowsiness, dizziness. Exposure to higher concentrations may result in unconsciousness and even death. May cause liver injury and blood disorders. Prolonged exposure may lead to death due to irregular heart beat and kidney and liver disorders.
Ingestion - Causes severe burning in mouth and throat, pain in the chest and vomiting. Large quantities may cause symptoms similar to inhalation.
Skin Contact - Causes skin irritation resulting in redness and pain. Removes natural oils. May be absorbed through skin.
Eye Contact - Vapors causes pain and irritation to eyes. Splashes may cause severe irritation and possible eye damage.
Contact with liquid has defatting effect and may cause chronic irritation of skin with cracking and drying, and corresponding dermatitis.

Medical Conditions Generally Aggravated By Exposure: Persons with pre-existing skin disorders or eye problems, or impaired liver, kidney or respiratory function may be more susceptible to the effects of the substance.

4. First Aid Measures

Emergency and First Aid Procedures: If inhaled remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
If swallowed, DO NOT INDUCE VOMITING! Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.
In case of contact with eyes, hold eyelids apart and flush eyes with plenty of water. After initial flushings, remove any contact lenses and continue flushing for at least 20 minutes. Have eyes examined and tested by medical personnel.
In case of skin contact, immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

Note to Physician: Because kidney and liver effects may be delayed, keep victim under observation for 24 to 48 hr. Administration of fluids may help to prevent kidney failure. Obtain blood glucose, urinalysis, liver function tests, chest x-ray, and monitor cardiac function and fluid/electrolyte status. Monitor liver and kidney function for 4 to 5 days after exposure. Disulfiram, its metabolites, and a high carbohydrate diet appear to protect somewhat against chloroform toxicity. Do not give adrenalin! Tests may show increased bilirubin, ketosis, lowered blood prothombin, and fibrogen.

5. Fire Fighting Measures

Flash Pt: No data.

Explosive Limits: LEL: No data. UEL: No data.

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

Flammable Properties and Hazards: Sealed containers may rupture when heated.

Extinguishing Media: Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray when fighting fires involving this material.

Unsuitable Extinguishing Media: No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Wear a NIOSH/MSHA approved self-contained breathing apparatus and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).
Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.
After removal, ventilate contaminated area and flush thoroughly with water.

7. Handling and Storage

Hazard Label Information: Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation. Wash thoroughly after handling.

Precautions To Be Taken in Handling: Avoid breathing (dust, vapor, mist, gas).
Avoid contact with eyes, skin, and clothing.
Avoid prolonged or repeated exposure.
Do not reuse this container.
Use with adequate ventilation.
Wash thoroughly after handling.

Precautions To Be Taken in Storing: Keep tightly closed.
Store at correct temperature.

Other Precautions: Protect from light.

8. Exposure Controls/Personal Protection

Protective Equipment Summary - Hazard Label Information: Eye wash station in work area Lab coat Protective gloves Safety glasses Safety shower in work area Vent Hood

Respiratory Equipment (Specify Type): Government approved respirator as conditions warrant.

Eye Protection: Safety glasses

Protective Gloves: Compatible chemical-resistant gloves

Other Protective Clothing: Lab coat

Engineering Controls (Ventilation etc.):	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
Work/Hygienic/Maintenance Practices:	Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Wash thoroughly after handling.

9. Physical and Chemical Properties

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Melting Point:	No data.
Boiling Point:	No data.
Autoignition Pt:	No data.
Flash Pt:	No data. Method:
Explosive Limits:	LEL: No data. UEL: No data.
Specific Gravity (Water = 1):	No data.
Vapor Pressure (vs. Air or mm Hg):	160 MM_HG at 20.0 C
Vapor Density (vs. Air = 1):	No data.
Evaporation Rate (vs Butyl Acetate=1):	No data.
Solubility in Water:	Insoluble* at 25.0 C
Other Solubility Notes:	*Sol. in EtOH, DMSO, & DMF
Percent Volatile:	No data.
Corrosion Rate:	No data.
Formula:	$C_{36}H_{61}N_5O_6$
Molecular Weight:	659.9
pH:	No data.
Appearance and Odor:	A clear, colorless solution

10. Stability and Reactivity

Stability:	Unstable [ ] Stable [X]
Conditions To Avoid - Instability:	protect from air protect from light
Incompatibility - Materials To Avoid:	acetone aluminum dinitrogen tetroxide fluorine magnesium powder methanol potassium sodium sodium methoxide strong bases tert-butoxide triisopropylphosphine
Hazardous Decomposition Or Byproducts:	carbon dioxide carbon monoxide hydrogen chloride phosgene
Hazardous Polymerization:	Will occur [ ] Will not occur [X]
Conditions To Avoid - Hazardous Polymerization:	No data available.

11. Toxicological Information

Toxicological Information: The toxicological effects of this compound have not been thoroughly studied.

Toxicity Data:
Inhalation LC50 (rat): 47702 mg/m3/4H
Oral LD50 (rat): 908 mg/kg
Skin LD50 (rabbit): >20 gm/kg

Irritation Data:
Skin (rabbit)10 mg 24H mild effect
Eye (rabbit): 20 mg 24H moderate effect

Chronic Toxicological Effects: Investigated as a tumorigen, mutagen, reproductive effector.

Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here.
See actual entry in RTECS for complete information.
Chloroform RTECS Number: FS9100000

Carcinogenicity/Other Information: Listed as A3 animal carcinogen

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

12. Ecological Information

Ecological Information: Runoff from fire control or dilution water may cause pollution.

13. Disposal Considerations

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

14. Transport Information

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name: Chloroform

DOT Hazard Class: 6.1

DOT Hazard Label: POISON

UN/NA Number: 1888

DOT Packing Group: III

Additional Transport Information: Transport in accordance with local, state, and federal regulations.

15. Regulatory Information

US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. C-12 NBD Ceramide	448191-32-0	No	No	No	No
2. Chloroform	67-66-3	Yes 10000 LB	Yes 10 LB	Yes	Yes

US EPA CAA, CWA, TSCA

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 65
1. C-12 NBD Ceramide	448191-32-0	No	No	No	No
2. Chloroform	67-66-3	HAP	No	8A CAIR	Yes

16. Other Information

Company Policy or Disclaimer

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.