

DS-Phytosphingosine



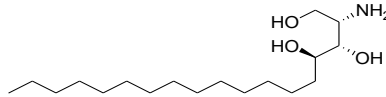
MATERIAL SAFETY DATE SHEET - COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.

SECTION 1. Identification of the substance/ mixture and of the company/ undertaking

1.1. Product identifier

Product name : DS-Phytosphingosine
 Common chemical name : PHYTOSPHINGOSINE
 Synonyms : (2S, 3S, 4R)-2-Amino-1,3,4-octadecanetriol, 4D-Hydroxysphinganine.
 INCI Name : Phytosphingosine
 Reach status : 01-2120788914-36-0000
 CAS number : 554-62-1
 EC number : 439-210-6
 Chemical formula : C₁₈H₃₉NO₃

Structure formula :



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

Identified uses : Cosmetic and personal care product
 Uses advised against : No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier : Solus Advanced Materials Co., Ltd.
 Address : 10, Suji-ro 112beon-gil, Suji-gu, Yongin-si, Gyeonggi-do, Republic of Korea
 Tel. : +82 2-3670-8374/ +82 2-3670-8376
 Manufacturer : Solus Advanced Materials Co., Ltd. IKSAN PLANT
 Address : 11, Seogam-ro 11-gil, Iksan-si, Jeollabuk-do, Republic of Korea
 Tel. : +82-63-830-8900

1.4. Emergency telephone number

Emergency telephone : +82-2-3670-8376

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture Classification (EC/1272/2008)

Physical hazards : Not Classified.
 Health hazards : Eye Dam. 1 - H318
 Environmental hazards : Aquatic Chronic 1 - H410

2.2. Label elements

Symbol :



Signal word : Danger

Hazard statement :

H318 Causes serious eye damage.
 H410 Very toxic to aquatic life with long lasting effects.
 Precautionary statements : P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/ doctor.
 P391 Collect spillage.
 P501 Dispose of contents/ container in accordance with national regulations.

SECTION 3. Composition/information on ingredients

3.1. Substances

Ingredient Name	CAS No.	EINECS No.	Reach Status/ Registration No.	% (By HPLC)
Phytosphingosine (INCI : Phytosphingosine)	554-62-1	439-210-6	01-2120788914-36-0000	min. 90%
*Synonyms : (2S, 3S, 4R)-2-Amino-1,3,4-octadecanetriol or 4D-Hydroxysphinganine				

SECTION 4. First aid measures**4.1. Description of first aid measures****General information :**

Get medical attention if any discomfort continues.

Inhalation :

Remove person to fresh air and keep comfortable for breathing. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration.

Ingestion :

Rinse mouth thoroughly with water. Get medical attention immediately.

Skin contact :

Remove contaminated clothing immediately and wash skin with soap and water.

Eye contact :Do not rub eye. Remove any contact lenses and open eyelids wide apart.
Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes.
Get medical attention immediately.**4.2. Most important symptoms and effects, both acute and delayed****Inhalation :**

Not available.

Ingestion :

Not available.

Skin contact :

Not available.

Eye contact :

Not available.

4.3. Indication of any immediate medical attention and special treatment needed**Notes for the doctor :**

Treat symptomatically.

SECTION 5. Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media :**

Use foam, carbon dioxide, dry powder or water fog to extinguish.

Unsuitable extinguishing media :

None Known.

5.2. Special hazards arising from the substance or mixture**Specific hazards :**

The product is not flammable. Dust may form explosive mixture with air.

Hazardous combustion products :Thermal decomposition or combustion products may include the following substances:
Carbon dioxide (CO₂). Carbon monoxide (CO). Nitrous gases (NO_x).**5.3. Advice for firefighters****Protective actions during firefighting :**Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
Avoid the spillage or runoff entering drains, sewers or watercourses.
Use water to keep fire exposed containers cool and disperse vapours.**SECTION 6. Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****Personal precautions :**

Wear protective clothing and gloves.

6.2. Environmental precautions**Environmental precautions :**

Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up**Methods for cleaning up :**Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into suitable waste disposal containers and seal securely.
Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor. Avoid generation and spreading of dust.
Wear protective clothing as described in Section 8 of this safety data sheet.**SECTION 7. Handling and storage****7.1. Precautions for safe handling****Usage precautions :**Avoid contact with skin and eyes.
Avoid generation and spreading of dust. Do not eat, drink or smoke when using this product.
Take precautionary measures against static discharges.**Advice on general occupational hygiene :**

Provide eyewash station and safety shower.

7.2. Conditions for safe storage, including any incompatibilities**Storage precautions :**Keep container tightly closed and dry.
Protect containers from damage.
Earth container and transfer equipment to eliminate sparks from static electricity.**7.3. Specific end use(s)****Specific end use(s)**

The identified uses for this product are detailed in Section 1.2.

SECTION 8. Exposure Controls/personal protection**8.1. Control parameters**

DNEL :

Not available.

8.2. Exposure controls

Protective equipment :



Appropriate engineering controls :

Provide adequate general and local exhaust ventilation.

Eye/face protection :

Wear chemical splash goggles.

Hand protection :

Wear protective gloves made of the following material: Rubber (natural, latex).

Other skin/ body protection :

Wear protective clothing.

Hygiene measures :

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

SECTION 9. Physical and Chemical Properties

Appearance :

Powder

Color :

White to off-white

Odor :

Characteristic

Melting point :

101°C

Initial boiling point/ range :

Technical impossibility to obtain the data.

Flash point :

Non flammable

Flammability (solid, gas) :

The product is not flammable.

Vapour pressure :

0.2 Pa @ 20°C

Relative density :

1.04 @ 20°C

Solubility(ies) :

0.0026 g/l water @ 20°C

Partition coefficient :

log Kow: 6.2

Explosive properties :

No chemical groups present in the product that are associated with explosive properties.

Oxidising properties :

No chemical groups present in the product that are associated with oxidising properties.

Particle size :

7.3~1410 µm

Molecular weight :

317.5

SECTION 10. Stability and reactivity**10.1. Reactivity**

Reactivity :

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability :

Stable at normal ambient temperatures and when used as recommended.

Stable at normal ambient temperatures for 24 months

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions :

No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid :

No specific requirements are anticipated under normal conditions of use.

10.5. Incompatible materials

Materials to avoid :

No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition product :

Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrous gases (NO_x).**SECTION 11. Toxicological information****11.1. Information on toxicological effects**

Acute toxicity - oral :

LD₅₀ > 5000 mg/kg, Oral, Rat

Acute toxicity - dermal :

Not available.

Acute toxicity - Inhalation

Not available.

Skin corrosion/Irritation

Not irritating.

Serious eye damage/Irritation

Irritating.

Respiratory sensitisation

Not available.

Skin sensitisation

Not sensitising.

Germ cell mutagenicity	(In vitro) Bacterial reverse mutation test : Negative. (In vivo) Not available
Carcinogenicity	Not available.
Reproductivity toxicity	Not available.
Specific target organ toxicity	Not available.
Aspiration hazard	Not available.

SECTION 12. Ecological Information

12.1. Toxicity Acute aquatic toxicity

Acute aquatic toxicity

LE(C) ₅₀	0.01 < L(E)C ₅₀ ≤ 0.1
M factor (Acute)	10
Acute toxicity - Fish	LC ₅₀ , 96 hours: 0.065 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48
Acute toxicity - Aquatic plants	EC ₅₀ , 72
Chronic toxicity - fish early life stage :	NOEC, 72 hours: 0.0127 mg/l, Pseudokirchneriella subcapitata
Chronic toxicity - aquatic invertebrates :	Technically not feasible.
Acute toxicity -microorganisms	Not available

Chronic aquatic toxicity

M factor (Chronic)	10
Chronic toxicity - fish early lifestage	Not available
Short term toxicity - embryo and sac fry stages	Not available
Chronic toxicity - aquatic invertebrates	Not available

12.2. Persistence and degradability

Persistence and degradability :	The product is readily biodegradable.
Biodegradation	Water - Degradation 68% : 28days

12.3. Bioaccumulative potential

Bioaccumulative potential :	Not available.
Partition coefficient :	log Kow : 6.2

12.4. Mobility in soil

Mobility	Not available.
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12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment :	Not available.
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12.6. Other adverse effects

Avoid releasing into the environment

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Disposal methods	Dispose of waste via a licensed waste disposal contractor. Dispose of waste product or used containers in accordance with local regulations
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SECTION 14. Transport information

14.1 ADR/ RID

UN Number	UN 3077
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Phytosphingosine).
Transport hazard class	Class 9
Packing group :	Packing group III
Transport hazard label	9+ENV.
Environmental hazards	YES - Environmentally hazardous substance/marine pollutant
Classification code	M7
Hazard identification	No. 90
Limited quantity	5kg
Excepted quantity	E1
Tunnel restriction code	-

*According to special provision 375, this substance when carried in single or combination packagings having a net mass per single or inner packaging of 5 kg or less, are not subject to any other provisions of ADR provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 of ADR regulation.

14.2 IMDG

UN Number	UN 3077
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Phytosphingosine).
Transport hazard class	Class 9
Packing group :	Packing group III
Transport hazard label	9+ENV.
EmS	F-A, S-F
Environmental hazards	YES - Environmentally hazardous substance/marine pollutant
Limited quantity	5kg
Excepted quantity	E1

*According to 2.10.2.7 of IMDG code, this substance when carried in single or combination packagings having a net mass per single provisions or inner packaging of 5 kg or less, are not subject to any other provisions of the IMDG code provided the packagings meet the general of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 of IMDG code.

14.3 IATA

UN Number	UN 3077
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Phytosphingosine).
Transport hazard class	Class 9
Packing group :	Packing group III
Packing instruction (passenger aircraft)	956 (400 kg)
Packing instruction (LQ)	Y956 (30 kg G)
Packing instruction (cargo aircraft)	956 (400 kg)

*According to special provision A197, this substance when carried in single or combination packagings having a net mass per single or inner packaging of 5 kg or less, are not subject to any other provisions of IATA provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8 of IATA regulation.

14.4 DOT

UN Number	UN3077
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Phytosphingosine).
Transport hazard class	Class 9
Packing group :	Packing group III
Packing instruction (passenger aircraft)	956 (400 kg)
Packing instruction (LQ)	Y956 (30 kg G)
Packing instruction (cargo aircraft)	956 (400 kg)

*According to special provisions 49 CFR 173.155, this substance when carried in single or combination packagings having a net mass per single or inner packaging of 5 kg(11lbs) or less, are not subject to any other provisions of DOT provided the product is packed in a strong outer packaging.

SECTION 15. Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Authorisations (Title VIIRegulation 1907/2006)	No specific authorisations are known for this product.
Restrictions (Title VIIIRegulation 1907/2006)	No specific authorisations are known for this product.

15.2. Chemical safety assessment

An Exposure Scenario has not been prepared as a CSR was not required for registration.

SECTION 16. Other information

Preparation date(DD/MM/YYYY) : 11/ 12/ 2016

Revision date(DD/MM/YYYY) : 17/ 02/ 2021

Notice to reader :

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.