



T.E.N Co., LTD

ACE Dongbaek Tower 2-603,16-4, Dongbaekjungang-ro, 16beon-gil,
Giheung-gu, Yongin-si, Gyeonggi-do, Korea
Tel : +82.(0)31.8013.6882 / Fax : +82.(0)31.8060.7336

MATERIAL SAFETY DATA SHEET

Spirulina Extract HD

ITEM CODE : T0467

1. PRODUCT AND COMPANY IDENTIFICATION

- a) Product Name : **Spirulina Extract HD**
- b) Recommended use of the chemical and restrictions on use: COSMETIC INGREDIENT
- c) Manufacturer/Supplier/Distributor Information
 - Name : T.E.N CO., LTD
 - Address : ACE Dongbaek Tower 2-603, 16-4, Dongbaekjungang-ro, 16beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Korea
 - Emergency phone number: : +82.(0)31.8013.6890

.....
2. Hazards identification

- a) Hazard-Risk Classification
 - Classification (Regulation (EC) No 1272/2008)
: This product is not classified as hazardous material according to CLP regulations.
- b) Label elements including precautionary statements
 - Labeling (Regulation (EC) No 1272/2008)
: This product is not classified according to CLP regulations.
 - Symbol : No data available
 - Signal Word : No data available
 - Hazard-Risk Statement : No data available
 - Precautionary Statement

Protection

- Wash thoroughly treated area after handling
- Wear (Protective gloves, Protective clothing, Safety glasses, Face protection device)
- Wash with plenty of soap and water if on skin
- Immediately rinse with plenty of water if on skin
- Remove contact lenses
- Get medical advice if skin irritation develops
- Get medical advice if eye irritation develops
- Take off contaminated clothing and wash before reuse

Response

- Store in a well-ventilated place. Keep container tightly closed
- Store locked up
- Protect from sunlight.
- Do not expose to temperatures exceeding 50 °C

Disposal

- Dispose of contents/container in accordance with related regulations in Korea.

Other Hazard-Risk which are not included in the classification criteria (e.g. dust explosion hazard)

- Health : 2
- Fire : 1
- Reactivity : 0

3. Composition / Information on ingredients

INCI Name	CAS Number	EINECS No.	Composition (%)
Spirulina Platensis Extract	223751-80-2	-	98.0
1,2-Hexanediol	6920-22-5	230-029-6	2.0

4. First aid measures

- a) Eye contact : Immediately rinse with plenty of water for at least 20 minutes while keeping the eye wide open. Get medical attention immediately.
- b) Skin contact : Rinse with water. Get medical advice if irritation develops
- c) Inhalation : Immediately move to fresh air. If it is hard to breathe, consult a physician
- d) Ingestion : Rinse mouth out with water. If large amounts were swallowed, get medical advice
- e) Indication of immediate medical attention and notes for physician:
 : Be aware of relevant substance and take protective actions

5. Fire-Fighting measures

a) Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media :
Dry sand, Dry chemical, alcohol resistant foam, water spray, regular foam, CO₂
- Extinguishing media which must not be used for safety reason
Water in the form of a solid jet

b) Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products)

- A fire will open produce a thick black smoke.
- Exposure to decomposition products may be hazardous to health.
- Do not breathe in smoke.
- In the event of a fire, the following may be formed -Carbon monoxide (CO) and Carbon dioxide (CO₂).
- Container may explode when heated.

c) Special protective equipment and precautions for fire-fighters: Use suitable breathing apparatus

- Do wear appropriate protective equipment.
- Keep the safety distance.

6. Accidental release measures

a) Personal precautions, protective equipment and emergency procedures

- Wear personal protection equipment.
- Remove all sources of ignition

b) Environmental precautions and protective procedures:

- Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.
- Prevent any material from entering drains or waterways.

c) Methods and materials for containment and cleaning up:

- Clean preferably with a detergent, do not use solvents.

7. Handling and storage

a) Precautions for safe handling

- Always wash hands after handling.
- Remove and wash contaminated clothing before re-using.
- Ensure that there is adequate ventilation, especially in confined areas.
- No smoking, eating or drinking in areas where the mixture is used.

b) Conditions for safe storage (including any incompatibilities)

- Handle in well-ventilated areas.
- Prevent access by unauthorized personnel.
- Packages which have been opened must be reclosed carefully and stored in an upright position.
- Always keep in packing made of an identical material to the original.
- The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area

8. Exposure controls & personal protection

a) Control parameters (e.g. occupational exposure limit values, biological limit values)

- Domestic regulation : No data available
- ACGIH : No data available
- Biological exposure limit : No data available

b) Appropriate engineering controls

- Ensure that there is adequate ventilation especially in confined area.

c) Personal protective equipment

Respiratory protection:

- Use suitable breathing apparatus

Eye protection

- Avoid contact with eye. Use eye protectors designed to protect against liquid splashes

Hands protection

- Wear suitable protective gloves in the event of prolonged or repeated skin contact.
- Use suitable gloves that are resistant to chemical agent.

Body protection

- Avoid skin contact.
- Wear suitable protective clothing.
- Work clothing worn by personnel shall be laundered regularly.
- After contact with the product, all parts of the body that have been soiled must be washed.

9. Physical and chemical properties

a) Appearance (physical state, color etc) : Clear Liquid, Colorless to light yellow

b) Odour : Characteristic

c) Odour threshold	: No data available
d) pH	: 6.00 – 8.00
e) Melting point/freezing point	: No data available
f) Initial boiling point and boiling range	: > 100°C
g) Flash point	: > 100°C
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	: No data available
l) Solubility	: No data available
m) Vapor density	: No data available
n) Relative density	: 0.980 – 1.030
o) Partition coefficient: n-octanol/water	: No data available
p) Auto-ignition temperature	: No data available
q) Decomposition temperature	: No data available
r) Viscosity	: No data available
s) Formula mass	: No data available
t) Heavy metals (ppm)	: <20
u) As (ppm)	: <2
v) Microbiology	: <100

10. Stability and reactivity

- a) Chemical stability and possibility of hazardous reactions
 - This mixture is stable under the recommended handling and storage condition of SECTION 7
- b) Conditions to avoid (e.g. static discharge, shock or vibration, etc)
 - Avoid direct sources of heat.
- c) Incompatible materials
 - No data available
- d) Hazardous decomposition products
 - The thermal decomposition may release/form carbon monoxide and carbon dioxide.

11. Toxicological information

- a) Information on the likely routes of exposure:

b) Health hazards information

- Acute toxic : No data available
- Skin corrosive/irritant : No data available
- Serious eye damage/eye irritation : No data available
- Respiratory sensitization : No data available
- Skin sensitization : No data available
- Carcinogenicity
 - Occupation safety and health acts : None
 - Ministry of Labor : None
 - IARC : None
 - OSHA : None
 - ACHIH : None
 - NTP : None
 - EU CLP : None
- Germ Cell Mutagenicity : No data available
- 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

12. Ecological information

- a) Aquatic and terrestrial ecotoxicity : No data available
- b) Persistence and degradability : No data available
- c) Bioaccumulative potential : No data available
- d) Mobility in soil : No data available
- e) Other adverse effects : No data available

13. Disposal considerations

- a) Disposal method
 - Proper waste management of mixture and/or its container must be determined in accordance with related regulation.
- b) Disposal precaution (including the disposal method of contaminated container and packaging)

- Proper waste management of mixture and/or its container must be determined in accordance with related regulation.
- Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.
- Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.
- Do not contaminate the ground or water with waste; do not dispose of waste into the environment. Do not pour into drains or waterways.


14. Transport information

- a) UN number : No categorization information as dangerous good under UN regulation.
- b) UN proper shipping name : Not applicable
- c) Transport hazard class : Not applicable
- d) Packing group (if applicable) : Not applicable
- e) Marine pollution (yes/no) : Not applicable
- f) Special precaution which a user to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises: Not applicable. Exempt from transport classification and labeling. Transport product in compliance with provisions of the ADR (European Agreement concerning the international Carriage of Dangerous Goods by Road) for road, RID (Regulations concerning the International Carriage of Dangerous Goods by Rail) for rail, IMDG (International Maritime Dangerous Goods) for sea and ICAO/IATA (Technical Instruction for the Safe Transport of Dangerous Goods by Air by The International Civil Aviation Organization / International Air Transport Association) for air transport (ADR 2009-IMDG 2008 – ICAO/IATA 2011).

15. Regulatory information

- a) Industrial Safety and Health Act : No data available
- b) Toxic Chemical Control Act : No data available
- c) Dangerous Material Safety Control Act : No data available
- d) Wastes Management Act : No data available
- e) Other requirements in domestic and other countries: No data available

16. Other information

	T.E.N Co., LTD ACE Dongbaek Tower 2-603, 16-4, Dongbaekjungang-ro, 16beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Korea Tel : +82.(0)31.8013.6882 / Fax : +82.(0)31.8060.7336	
	MATERIAL SAFETY DATA SHEET	Spirulina Extract HD

a) Information source and references: No data available

b) Issuing date: 2018. 05. 18

c) Revision number and date: 1. 2020. 10. 22

d) others:

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations. The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions. It is at all time the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.