



Safety data sheet

According to 1907/2006/EC, Article 31

1. Identification of the substances/mixture and of the company/undertaking

Product Identifier

Trade name: Teavigo[®]

Article number: 491661

CAS Number: 989-51-5

EC number: NA

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

No further relevant information available.

Application of the substance / the preparation: Food ingredient

Details of the supplier of the safety data sheet

Manufacture:

Taiyo Green Power Co. Ltd.
22 Lihe Road, Shoufang Industrial Park, Wuxi New District
Jiangsu 214142 China

Supplier:

Taiyo Kagaku Co. Ltd.
800 Yamada Cho, Yokkaichi, Mie 512-1111 Japan

Further information obtainable from: Quality Assurance Department, Taiyo Kagaku Co. Ltd.

Emergency telephone number: During normal opening times: +81-59-340-0807

2. Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Category 4

H302: Harmful if swallowed.

Eye irritation, Category 2

H319: Causes serious eye irritation.

Skin sensitization, Sub-category 1A

H317: May cause an allergic skin reaction.

Chronic aquatic toxicity, Category 2

H411: Toxic to aquatic life with long lasting effects.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Harmful

R22: Harmful if swallowed.

Irritant

R36: Irritating to eyes.

R43: May cause sensitization by skin contact.

Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Label elements

Hazard pictograms:



Signal word: Warning

Continued to page 2



Safety data sheet

According to 1907/2006/EC, Article 31

Continued from page 1

Hazard statements:

H302: Harmful if swallowed.
H319: Causes serious eye irritation.
H317: May cause an allergic skin reaction.
H411: Toxic to aquatic life with long lasting effects.

Precautionary statement :

Prevention:

P261 Avoid breathing dust/ fume/ gas/ mist/
vapours/ spray.
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face
protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and
water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with
water for several minutes. Remove contact
lenses, if present and easy to do. Continue
rinsing.

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3. Composition/information on ingredients

Chemical characterization: (-)-Epigallocatechin gallate (EGCG)

CAS No. Description: 989-51-5

Identification number(s)

ELINCS No.: 479-560-7

4. First aid measures

Description of first aid measures

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.

If inhaled : Move to fresh air.
Keep patient warm and at rest.
Keep respiratory tract clear.
If unconscious place in recovery position and seek medical
advice.
Call a physician or poison control centre immediately.

Continued to page 3



Safety data sheet

According to 1907/2006/EC, Article 31

Continued from page 2

- In case of skin contact** : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
If symptoms persist, call a physician.
- In case of eye contact** : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed** : Clean mouth with water and drink afterwards plenty of water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
Obtain medical attention.

Information for 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. Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

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: Wear protective clothing.

Environmental precautions: Do not allow entering sewers/ surface or ground water.

Methods and material for containment and cleaning up: Pick up mechanically.

Reference to other sections: No dangerous substances are released.

7. Handling and storage

Handling

Precautions for safe handling

- Advice on safe handling** : Avoid formation of respirable particles.
Avoid exceeding of the given occupational exposure limits (see section 8).
Avoid contact with skin and eyes.
For personal protection see section 8.
Dispose of rinse water in accordance with local and national regulations.
Smoking, eating and drinking should be prohibited in the application area.

Continued to page 4



Safety data sheet

According to 1907/2006/EC, Article 31

Continued from page3

Advice on protection against fire and explosion : Avoid dust formation.
Provide appropriate exhaust ventilation at places where dust is formed.
Take precautionary measures against static discharges.

Storage

Store in a cool, dry place and keep out of direct sunlight. Iron container should be avoided as this substance will react with iron ion. It is good general practice to store in closed, preferably full, containers away from heat sources, and protected from extremes of temperature.

8. Exposure controls/personal protections

Additional information about design of technical facilities: No further data; see item 7.

Control parameters

Ingredients with limit values that require monitoring at the workplace: Not applicable

WEL Short-term value: Not applicable

Long-term value: Not applicable

Additional information: Not applicable.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Not required.

Protection of hands:

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.

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: Safety glasses

9. Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form: Powder

Color: off-white to pink

Odor: Characteristic odor

Change in condition

Melting point/Melting range: Not applicable.

Boiling point/Boiling range: Not applicable.

pH (2% solution): 3.0 – 5.5

Flash point: Not applicable.

Flammability (solid, gaseous): Product is not flammable.

Danger of explosion: Not determined.

Density: Not determined.

Solubility in / Miscibility with water: Soluble in water.

Other information: No further relevant information available.



Safety data sheet

According to 1907/2006/EC, Article 31

10. Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided: This product does not undergo spontaneous decomposition.

Typical combustion products are carbon monoxide, carbon dioxide, and water.

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

Toxicological information

Acute oral toxicity	:	LD50 (rat): 200 - 2 000 mg/kg (OECD Test Guideline 423)
Acute dermal toxicity	:	LD50 (rat): > 2 000 mg/kg (OECD Test Guideline 402)
Skin corrosion/irritation	:	No skin irritation (rabbit, OECD Test Guideline 404, 4 h)
Serious eye damage/eye irritation	:	Eye irritation (rabbit, OECD Test Guideline 405)
Respiratory or skin sensitization	:	Causes sensitization. (guinea pig, Various test systems)
Germ cell mutagenicity	:	
Genotoxicity in vitro	:	not mutagenic (Ames test, OECD Test Guideline 471) genotoxic (In vitro gene mutation study in mammalian cells, OECD Test Guideline 476)
Genotoxicity in vivo	:	not genotoxic (mouse, Bone marrow, Mutagenicity (micronucleus test)) No indication for human genotoxicity known.
Reproductive toxicity	:	A 2-generation study in rats showed no negative effects on reproduction parameters. NOAEL: 1 000 mg/kg bw/d (rat, Oral, OECD Test Guideline 416)
Teratogenicity	:	not teratogenic not embryotoxic NOAEL: 1 000 mg/kg bw/d (rat, Oral, OECD Test Guideline 414)

Continued to page 6



Safety data sheet

According to 1907/2006/EC, Article 31

Continued from page 5

STOT - single exposure	:	The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	:	NOEL (Oral, dog) : 50 mg/kg bw/d Sub-chronic toxicity study (90-day) capsules
	:	NOEL (Oral, rat) : 500 mg/kg bw/d Sub-chronic toxicity study (90-day) feed admix
Aspiration toxicity	:	No aspiration toxicity classification
Further information	:	May cause irritation of respiratory tract.
Experience with human exposure: Inhalation	:	Cases of asthma during handling of green tea extract have been reported rarely.

12. Ecological information

Toxicity

Toxicity to fish	:	Cyprinus carpio (Carp) LC50 (96 h) 7,5 mg/l (nominal concentration) (OECD Test Guideline 203)	:	NOEC (96 h) 5,6 mg/l		
Toxicity to daphnia and other aquatic invertebrates	:	Daphnia magna (Water flea) EC50 (48 h) 40 mg/l (nominal concentration) (OECD Test Guideline 202)				
Toxicity to algae	:	Scenedesmus capricornutum (fresh water algae) ErC50 (72 h) 3,4 mg/l (nominal concentration) (OECD Test Guideline 201)	:	EbC50 (72 h) 0,9 mg/l (nominal concentration)		
Toxicity to bacteria	:	activated sludge EC50 (3 h) 520 mg/l (OECD Test Guideline 209)	:	NOEC (3 h) >= 100 mg/l	:	activated sludge Concentration of the substance (28 d) 20,5 mg/l No inhibition was observed under the biodegradation test conditions. (OECD Test Guideline 301B)

Continued to page 7



Safety data sheet

According to 1907/2006/EC, Article 31

Continued from page 6

Persistence and degradability

Biodegradability : Not readily biodegradable.
17 % (28 d)
(OECD Test Guideline 301B)

Bioaccumulative potential

Partition coefficient: n-octanol/water : log Pow 1,1 (20 °C , pH 4,0; OECD Test Guideline 107)

Mobility in soil

Distribution among environmental compartments : Adsorption, Soil
Koc 7,7 (OECD Test Guideline 121)
high mobility

Physico-chemical removability : Neutralization is normally necessary before waste water is discharged into water treatment plants.

Surface tension : 72,6 mN/m (20 °C, OECD Test Guideline 115)

Results of PBT and vPvB assessment

Assessment : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
: This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

13. Disposal conditions

Waste treatment methods

Recommendation: Smaller quantities can be disposed of with household waste.

Uncleaned packaging

Recommendation: Disposal must be made according to official regulations.



Safety data sheet

According to 1907/2006/EC, Article 31

14. Transport information

UN-Number

ADR, ADN, IMDG, IATA: 3077

UN proper shipping name

ADR : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S. ((-)-Epigallocatechin gallate)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S. ((-)-Epigallocatechin gallate)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S. ((-)-Epigallocatechin gallate)

IATA : Environmentally hazardous substance, solid, n.o.s. ((-)-
Epigallocatechin gallate)

Transport hazard class(es)

ADR, ADN, IMDG, IATA Class: 9

Packing group

Packaging group : III
Classification Code : M7
Hazard identification No : 90
Labels : 9
Tunnel restriction code : (E)

RID

Packaging group : III
Classification Code : M7
Hazard identification No : 90
Labels : 9

IMDG

Packaging group : III
Labels : 9
EmS Number : F-A, S-F

IATA

Packing instruction (cargo
aircraft) : 956
Packaging group : III
Labels : 9

Environmental hazards

Marine pollutant: yes

Special precautions for user: No additional requirements.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.



Safety data sheet

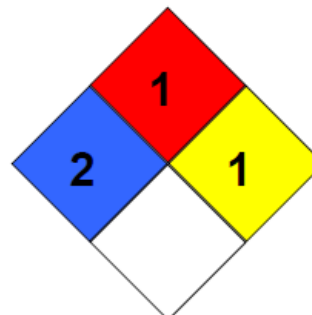
According to 1907/2006/EC, Article 31

15. Regulatory Information

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

NFPA Classification

Health hazard: 2
Fire Hazard: 1
Reactivity Hazard: 1



Chemical safety assessment: A Chemical Safety Assessment is not required for this substance.

16. Other information

MSDS Date: August 11, 2014

For Information Contact:

Charles Xu QA Manager, Taiyo Green Power Co.,Ltd, China.
qa@taiyogreenpower.com, +86-510-85311783

Additional information: This information given and the recommendations made herein apply to our product(s) alone and are not combined with other product(s). Such are based on our research and on data from other reliable sources and are believed to be accurate. However, no guaranty of accuracy is made. It is purchaser's responsibility before using any product to verify this data under their own operation conditions and to determine whether the product is suitable for their purpose.