

Material Safety Data sheet

Section 1: Product and Company Information

Product Name	Pseudomonas CN Selective Supplement		
Catalogue Number	iS47078	Technical Phone	0098 21 66787291
E-mail	ibresco@gmail.com	Fax No	09391003565
Company Address	Zist Kavosh Iranian, No.432, East Kokab Av,45 Metri Golshahr, Karaj, Iran.		

Section 2: Hazards Identification

GHS Classification in accordance with Hazardous Products Regulations (HPR)

(SOR/2015-17)

Acute toxicity, Oral (Category 4), H302
 Skin irritation (Category 2), H315
 Serious eye damage (Category 1), H318
 Carcinogenicity (Category 2), H351
 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
 Specific target organ toxicity - repeated exposure, Oral (Category 2), Gastrointestinal tract, H373
 Short-term (acute) aquatic hazard (Category 1), H400
 Long-term (chronic) aquatic hazard (Category 1), H410

GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard Statements

H302 Harmful if swallowed.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H335 May cause respiratory irritation.
 H351 Suspected of causing cancer.
 H373 May cause damage to organs (Gastrointestinal tract) through prolonged or repeated exposure if swallowed.
 H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P260 Do not breathe dust.
 P264 Wash skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
 P302 + P352 IF ON SKIN: Wash with plenty of water.
 P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS

none

Section 3: Composition / Information on Ingredients

Mixture

Component	Classification	Concentration*	
N-Cetyl-N'N'N-trimethylammonium bromide			
CAS-No. EC-No. Registration number	57-09-0 200-311-3 01-2119989160-35- XXXX	Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; STOT SE 3; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H302, H315, H318, H335, H373, H400, H410 M-Factor - Aquatic Acute: 100 - Aquatic Chronic: 10	>= 60 - < 80 %
sodium-1-ethyl-1,4-dihydro-7-methyl-4-oxo-1,8-naphthyridin-3-carboxylate			
CAS-No.	3374-05-8	Acute Tox. 4; Carc. 2; H302, H351	>= 5 - < 10 %

* Weight %

Section 4: First Aid Measures

Description of first-aid measures

General advice	Show this material safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air. Call in physician.
In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.
In case of eye contact	After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.
If swallowed	After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Indication of any immediate medical attention and special treatment needed

No data available

Section 5: Fire Fighting Measures

Extinguishing media

Suitable extinguishing media

Water Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NOx)

Hydrogen bromide gas

Combustible.

Fire may cause evolution of:

hydrogen bromide, nitrogen oxides

Development of hazardous combustion gases or vapors possible in the event of fire.

Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage

Precautions for safe handling**Advice on safe handling**

Work under hood. Do not inhale substance/mixture.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.

Conditions for safe storage, including any incompatibilities**Storage conditions**

Tightly closed. Dry.

Recommended storage temperature see product label.

Storage class

Storage class (TRGS 510): 11: Combustible Solids

Section 8: Exposure Controls / Personal Protection

Control parameters**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

Exposure controls**Appropriate engineering controls**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles.

Skin protection

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: > 480 min

Material tested:

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: > 480 min

Material tested: KCL 741 Dermatril® LKCL 741 Dermatril® L

Body Protection

protective clothing

Respiratory protection

Recommended Filter type: Filter type P3

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure

Do not let product enter drains.

Section 9: Physical and Chemical Properties

Physical state	Solid
Color	White
Odor	Odorless
Odor Threshold	Not applicable
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Flash point	No data available
Vapor pressure	No data available
Vapor density	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
pH	8.2 - 8.8 at 63 g/l at 20 °C (68 °F)
Viscosity	No data available

Water solubility	63 g/l at 20 °C (68 °F) - soluble
Partition coefficient: n-octanol/water	No data available
Density	No data available
Relative density	No data available
Explosive properties	Not classified as explosive.
Oxidizing properties	none
Other safety information	No data available

Section 10: Stability and Reactivity

Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

Possibility of hazardous reactions

Caution! In contact with nitrites, nitrates, nitrous acid possible liberation of nitrosamines!

Violent reactions possible with:

Strong oxidizing agents

Peroxides

Ammonia

Alkali metals

Reducing agents

Strong bases

Conditions to avoid

no information available

Incompatible materials

No data available

Hazardous decomposition products

In the event of fire: see section 5

Section 11: Toxicological Information

Information on toxicological effects

Mixture

Acute toxicity estimate Oral - 1,581 mg/kg
(Calculation method)

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Acute toxicity

Symptoms: Possible symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages: damage of respiratory tract
Acute toxicity estimate Dermal - > 2,000 mg/kg (Calculation method)

Skin corrosion/irritation

Remarks: Mixture causes skin irritation.

Serious eye damage/eye irritation

Remarks: Mixture causes serious eye damage.

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

Evidence of a carcinogenic effect.

Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	Mixture may cause respiratory irritation.
Specific target organ toxicity - repeated exposure	Mixture may cause damage to organs through prolonged or repeated exposure. - Gastrointestinal tract
Aspiration hazard	No data available
Additional Information	Other dangerous properties can not be excluded. This substance should be handled with particular care. Handle in accordance with good industrial hygiene and safety practice.

Components

N-Cetyl-N'N'N-trimethylammonium bromide

	LD50 Oral - Rat - female - 1,550 mg/kg (OECD Test Guideline 401) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: Hexadecyltrimethylammonium chloride Inhalation: No data available
Acute toxicity	Inhalation: Irritating to respiratory system. LD50 Dermal - Rabbit - male and female - 2,150 mg/kg Remarks: (in analogy to similar products) (ECHA) The value is given in analogy to the following substances: Hexadecyltrimethylammonium chloride No data available Skin - Rabbit
Skin corrosion/irritation	Result: Irritating to skin. - 24 h Remarks: (ECHA) Eyes - Rabbit
Serious eye damage/eye irritation	Result: Causes serious eye damage. (OECD Test Guideline 405) Remarks: (in analogy to similar products) Maximization Test - Guinea pig
Respiratory or skin sensitization	Result: negative (OECD Test Guideline 406) Remarks: Aqueous solution
Germ cell mutagenicity	No data available
Carcinogenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	Inhalation - May cause respiratory irritation. - Respiratory system
Specific target organ toxicity - repeated exposure	Oral - May cause damage to organs through prolonged or repeated exposure. - Gastrointestinal tract
Aspiration hazard	No data available

sodium-1-ethyl-1,4-dihydro-7-methyl-4-oxo-1,8-naphthyridin-3-carboxylate

	LD50 Oral - 500.1 mg/kg (Expert judgment) Inhalation: No data available Dermal: No data available
Acute toxicity	

Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.
Germ cell mutagenicity	No data available
Carcinogenicity	This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.
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

Section 12: Ecological Information

Toxicity

Mixture	No data available
Persistence and degradability	No data available
Bio accumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not Conducted.
Endocrine disrupting properties	No data available
Other adverse effects	No data available

Components

N-Cetyl-N'N'N-trimethylammonium bromide

Toxicity to fish	semi-static test LC50 - Danio rerio (zebra fish) - 0.2 mg/l – 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	semi-static test EC50 - Daphnia magna (Water flea) - 0.037 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 0.00411 mg/l - 72 h (OECD Test Guideline 201) static test NOEC - Desmodesmus subspicatus (green algae) - 0.001 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	EC50 - activated sludge - 19 mg/l Remarks: (ECHA)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	NOEC - Daphnia magna (Water flea) - 0.023 mg/l - 21 d (OECD Test Guideline 211)

sodium-1-ethyl-1,4-dihydro-7-methyl-4-oxo-1,8-naphthyridin-3-carboxylate
No data available

Section 13: Disposal Consideration

Waste treatment methods

Product

Offer surplus and non- recyclable solutions to a licensed company. Contact a licensed professional waste disposal service to dispose of this material

Contaminated packaging

Dispose of as unused product.

Section 14: Transport Information

TDG

UN number: 3077 Class: 9 Packing group: III
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (NCetyl- N'N'N-trimethylammonium bromide)
Labels: 9
ERG Code: 171
Marine pollutant: no

IMDG

UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (NCetyl- N'N'N-trimethylammonium bromide)
Marine pollutant: yes
Marine pollutant: no

IATA

UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (N-Cetyl- N'N'Ntrimethylammonium bromide)

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

Section 15: Regulatory Information

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

Section 16: Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. *ibresco* shall not be held liable for any damage resulting from handling or from contact with the above product.

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