

### Material Safety Data sheet

#### Section 1: Product and Company Information

<b>Product Name</b>	CFC Selective Supplement		
<b>Catalogue Number</b>	iS47014	<b>Technical Phone</b>	0098 21 66787291
<b>E-mail</b>	ibresco@gmail.com	<b>Fax No</b>	09391003565
<b>Company Address</b>	Zist Kavosh Iranian, No.432, East Kokab Av,45 Metri Golshahr, Karaj, Iran.		

#### Section 2: Hazards Identification

##### Classification of the substance or mixture

##### GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)

Serious eye damage (Category 1), H318  
 Respiratory sensitization (Category 1), H334  
 Skin sensitization (Category 1), H317  
 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

H317 May cause an allergic skin reaction.  
 H318 Causes serious eye damage.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 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

P260 Do not breathe dust.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/ eye protection/ face protection.  
 P284 Wear respiratory protection.  
 P302 + P352 IF ON SKIN: Wash with plenty of water.  
 P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 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.  
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
 P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.  
 P362 + P364 Take off contaminated clothing and wash it before reuse.  
 P391 Collect spillage.  
 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*
<b>Cefalotin Sodium</b>			
CAS-No.	58-71-9	Resp. Sens. 1; Skin Sens. 1; H334, H317	$\geq 30 - < 60$ %
EC-No.	200-394-6		
<b>N-Cetyl-N'N'N-trimethylammonium bromide</b>			
CAS-No.	57-09-0	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	$\geq 5 - < 10$ %
EC-No.	200-311-3	M-Factor - Aquatic Acute: 100 - Aquatic Chronic: 10	
Registration number	01-211998916035 XXXX		
<b>Sodium fusidate</b>			
CAS-No.	751-94-0	Acute Tox. 4; H302	$\geq 5 - < 10$ %
EC-No.	212-030-3		

\* Weight %

### Section 4: First Aid Measures

#### Description of first-aid measures

<b>General advice</b>	First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.
<b>If inhaled</b>	After inhalation: fresh air. Call in physician.
<b>In case of skin contact</b>	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.
<b>In case of eye contact</b>	After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.
<b>If swallowed</b>	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 (CO<sub>2</sub>) 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 (NO<sub>x</sub>)

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Sulfur oxides  
Hydrogen bromide gas  
Sodium oxides  
Combustible.

Fire may cause evolution of:  
nitrogen oxides, Sulfur oxides, hydrogen bromide  
Development of hazardous combustion gases or vapors possible in the event of fire.

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**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.

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**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.

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**Section 6: Accidental Release Measures**

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**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.

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**Environmental precautions**

Do not let product enter drains.

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**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 carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

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**Reference to other sections**

For disposal see section 13.

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**Section 7: Handling and Storage**

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**Precautions for safe handling**

**Advice on safe handling**

Work under hood. Do not inhale substance/mixture.

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**Hygiene measures**

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

For precautions see section 2.

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

**Storage conditions** Tightly closed. Dry. Keep locked up or in an area accessible only to qualified or authorized persons.

Recommended storage temperature see product label.

**Storage class** Storage class (TRGS 510): 11: Combustible Solids

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**Section 8: Exposure Controls / Personal Protection**

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**Control parameters**

**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

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**Exposure controls**

**Appropriate engineering controls**

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

**Personal protective equipment**

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**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: KCL 741 Dermatril® L

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: > 480 min

Material tested: KCL 741 Dermatril® L

**Body Protection**

protective clothing

**Respiratory protection**

Recommended Filter type: Filter type P2

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	6.2 - 6.8 at 26.2 g/l at 20 °C (68 °F)
Viscosity	No data available
Water solubility	26.6 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
<b>Other safety information</b>	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

Violent reactions possible with:

Strong oxidizing agents

Strong acids

strong alkalis

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

#### 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

<b>Acute toxicity</b>	Acute toxicity estimate Oral - > 2,000 mg/kg (Calculation method) Symptoms: Possible symptoms:, mucosal irritations Acute toxicity estimate Dermal - > 2,000 mg/kg (Calculation method)
<b>Skin corrosion/irritation</b>	No data available
<b>Serious eye damage/eye irritation</b>	Remarks: Mixture causes serious eye damage.
<b>Respiratory or skin sensitization</b>	Mixture may cause allergy or asthma symptoms or breathing difficulties if inhaled. Mixture may cause an allergic skin reaction.
<b>Germ cell mutagenicity</b>	No data available
<b>Carcinogenicity</b>	No data available
<b>Reproductive toxicity</b>	No data available
<b>Specific target organ toxicity - single exposure</b>	No data available
<b>Specific target organ toxicity - repeated exposure</b>	Mixture may cause damage to organs through prolonged or repeated exposure. - Gastrointestinal tract

<b>Aspiration hazard</b>	No data available
<b>Additional Information</b>	Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.
<b>Components</b>	
<b>Cefalotin sodium</b>	
	LD50 Oral - Rat - > 10,000 mg/kg
<b>Acute toxicity</b>	Inhalation: No data available Dermal: No data available No data available
<b>Skin corrosion/irritation</b>	Remarks: No data available
<b>Serious eye damage/eye irritation</b>	Remarks: No data available
<b>Respiratory or skin sensitization</b>	No data available
<b>Germ cell mutagenicity</b>	No data available
<b>Carcinogenicity</b>	No data available
<b>Reproductive toxicity</b>	No data available
<b>Specific target organ toxicity - single exposure</b>	No data available
<b>Specific target organ toxicity - repeated exposure</b>	No data available
<b>Aspiration hazard</b>	No data available
<b>N-Cetyl-N'N'N-trimethylammonium bromide</b>	
	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
<b>Acute toxicity</b>	Inhalation: No data available 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
<b>Skin corrosion/irritation</b>	Result: Irritating to skin. - 24 h Remarks: (ECHA) Eyes - Rabbit
<b>Serious eye damage/eye irritation</b>	Result: Causes serious eye damage. (OECD Test Guideline 405) Remarks: (in analogy to similar products) Maximization Test - Guinea pig
<b>Respiratory or skin sensitization</b>	Result: negative (OECD Test Guideline 406) Remarks: Aqueous solution
<b>Germ cell mutagenicity</b>	No data available
<b>Carcinogenicity</b>	No data available
<b>Reproductive toxicity</b>	No data available

<b>Specific target organ toxicity - single exposure</b>	Inhalation - May cause respiratory irritation. - Respiratory system
<b>Specific target organ toxicity - repeated exposure</b>	Oral - May cause damage to organs through prolonged or repeated exposure. - Gastrointestinal tract
<b>Aspiration hazard</b>	No data available
<b>sodium fusidate</b>	
	LD50 Oral - Mouse - 1,500 mg/kg
<b>Acute toxicity</b>	Inhalation: No data available Dermal: No data available No data available
<b>Skin corrosion/irritation</b>	Remarks: No data available
<b>Serious eye damage/eye irritation</b>	Remarks: No data available
<b>Respiratory or skin sensitization</b>	No data available
<b>Germ cell mutagenicity</b>	No data available
<b>Carcinogenicity</b>	No data available
<b>Reproductive toxicity</b>	No data available
<b>Specific target organ toxicity - single exposure</b>	No data available
<b>Specific target organ toxicity - repeated exposure</b>	No data available
<b>Aspiration hazard</b>	No data available

## Section 12: Ecological Information

<b>Toxicity</b>	
<b>Mixture</b>	No data available
<b>Persistence and degradability</b>	No data available
<b>Bio accumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Results of PBT and vPvB assessment</b>	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
<b>Endocrine disrupting properties</b>	No data available
<b>Other adverse effects</b>	Discharge into the environment must be avoided.
<b>Components</b>	
<b>Cefalotin sodium</b>	No data available
<b>N-Cetyl-N'N'N-trimethylammonium bromide</b>	
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) -

Toxicity to bacteria	0.001 mg/l - 72 h (OECD Test Guideline 201) 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)
<b>Sodium fusidate</b>	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

<b>TDG</b>	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
<b>IMDG</b>	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
<b>IATA</b>	UN number: 3077 Class: 9 Packing group: III Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (N-Cetyl N'N'Ntrimethylammonium bromide)
<b>Further information</b>	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

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### **DISCLAIMER**

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

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### **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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