SAFETY DATA SHEET

ARIONEX water treatment

INCO® 515

According to the Regulation No. 1907/2006/EC (REACH) and No. 2015/830/EC

Version: 2022-09-07 / EN

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

1.1. Product identifier

Mixture name: INCO® 515

Chemical name: Organic bromine compounds aqueous solution.

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

Inhibitor of biofouling and biogrowth for water treatment and RO equipment.

1.3. Details of the supplier of the safety data sheet

Company: JSC "Arionex LT"

Address: Ašigalio g. 6c, LT-49142, Kaunas

Telephone: +370 37 214669 E-mail: info@arionex.eu

1.4. Emergency telephone

Poisoning control and information bureau

Address: Šiltnamių g. 29, LT -2043 Vilnius

Telephone number: 8 5 236 20 52 8 5 236 21 42 Fax: E-mail: info@tox.lt Work time: All day (24 hours).

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

Acute toxicity inhalation 3 H331 Toxic if inhaled. Skin Irritation 2 H315 Causes skin irritation.

Eve Damage 1 H318 Causes serious eve damage. Skin Sensitization 1 May cause an allergic skin reaction. H317

Aguatic Acute 1 H400 Very toxic to aquatic life.

2.2. Label elements

According to Regulation (EC) No 1272/2008 [CLP].

Pictogram:



Signal Word: Dangerous.

Dangerous components of the mixture:

DBNPA.

Hazard Statement:

H331 Toxic if inhaled.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

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Precautionary Statements:

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash hands thoroughly after handling. P264

Use only outdoors or in a well-ventilated area. P271

P272 Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection. P280

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

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

P362 Take off contaminated clothing and wash before reuse.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P311 Call a POISON CENTER or doctor/physician.

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

Immediately call a POISON CENTER or doctor/physician.

P273 Avoid release to the environment.

P391 Collect spillage.

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

Dispose of contents/container to accordance with local regulations. P501

2.3. Other hazards

No specific dangers known, if the regulations/notes for storage and handling are considered.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable.

3.2. Mixtures

Chemical name: Organic bromine compounds aqueous solution.

CAS No.	EINECS No.	Index No.	REACH Registration No.	Concentra- tion range (%)	Name	Classification according to Regulation (EC) No 1272/2008 [CLP]
10222-01-2	233-539-7	-	-	18 -23	2,2-dibromo-3- nitrilopropionamide (DBNPA)	Acute Tox. oral 4 H302 Acute Tox. Inhalation, 2 H330 Skin Irrit. 2H315 Skin Sens. 1H317 Eye Dam. 1H318 Aquatic acute 1 H400
25322-68-3	500-038-2	-	-	43 - 54	Polyethylene glycol	-

For the full text of the H-statemens mentioned in the Section, see Section 16.

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

Remove contaminated clothing.

If inhaled:

The product is not volatile.

On skin contact:

Remove contaminated clothing, footwear, watches, etc. And clean thoroughly before re-using them. Wash immediately with plenty of water. Seek medical treatment in all cases of irritation or burns.

On contact with eyes:

Immediately wash affected eyes for at least 10-15 minutes under running water with eyelids held open. Remove contact lenses if present and easy to do. Get immediate medical attention.

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On ingestion:

Immediately rinse mouth and drink at least 1.5 liters of water, seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed **Both acute symptoms:**

May cause respiratory tract irritation, coughing. If inhaled:

On skin contact: May cause skin irritation, sensitization or corrosion.

On contact with eyes: Causes serious eye damage.

May cause burns the mouth, throat and stomach. On ingestion:

Delayed symptoms:

If inhaled: Irritation, cough, shortness of breath.

On skin contact: Irritation.

Pain, tearing, redness, damage. On contact with eyes:

Stomach pains. On ingestion:

4.4. Indication of any immediate medical attention and special treatment needed

Treatment: No information available.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

All types of extinguishing media are suitable: water, dry powder, carbon dioxide, foam, sand and other.

5.2. Special hazards arising from the substance or mixture

Dangerous products of combustion of the mixture was not observed.

5.3. Advice for fire-fighters

Wear protective working tools such boots, coveralls, gloves, eye and face protection.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Avoid contact with skin and eyes. Wear personal protective equipment as described under Heading 8.

6.1.2. For emergency responders

Avoid contact with skin and eyes. Wear personal protective equipment as described under Heading 8.

6.2. Environmental precautions

Do not wash product down sewage and drainage systems or into bodies of water.

6.3. Methods and material for containment and cleaning up

Absorb the spillage into sand or other inert material, shovel into suitable containers. If containment is not possible and material enters the drain, dilute as much as possible with water.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

In the workplace must be good ventilation. In the workplace do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

The product should be stored in a cool, dry area in PVC or HDPE containers.

Storage stability:

Keep storage area should be dry, cool, 0 to 40 °C. Avoid freezing.

Unsuitable (incompatible) storage of chemicals: None.

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7.3. Specific end use(s)

Used as an inhibitor of biofouling for water treatment and RO equipment.

The concentrated or diluted with water product is dosed using a dosing pump. Only for professional user.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits:

No occupational exposure limits known.

Manufacturer TWA Recommendations: 0.25 mg / m³.

8.2. Exposure controls

8.2.1. Personal protective equipment

General safety and hygiene measures: General indoor ventilation. Do not eat, drink or smoke when working with product to avoid contact with skin or mouth. Immediately after working with cement or cement-containing materials, workers should wash or shower or use skin moisturizers. Remove contaminated clothing, footwear, etc., and clean thoroughly before re-using them.

Respiratory protection. Respirator. Very good ventilation is a simple dust filter (P1). Suitable ventilation - ABEK P3 protection. Poor ventilation is a breathing apparatus with air supply.

Eve protection. Wear approved glasses or safety goggles to preset contact with eyes (EN 166).

Skin protection. Wear rubber PVC gloves (EN 374), usual work clothes.

8.2.2. Environmental exposure controls

Do not wash product down sewage and drainage systems or into bodies of water.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Form: Liquid; Colour: Pale Yellow;

Odour: Weak smell product; **Odour threshold:** Not determined; pH, (20 °C): $1.0 \div 4.0;$ Melting / freezing point: -20°C;

 $1,20 \pm 0,05 \text{ g/cm}^3;$ Density (20 °C): **Solubility:** Soluble in water; **Boiling point/range:** 100 ÷ 130 °C; Flash point: Not determined: **Evaporation rate:** Not determined; Flammability: Not self-igniting;

Partitioning coefficient n-octanol/water (log Kow): Not applicable;

Self ignition: Not determined; Thermal decomposition: Not determined; **Explosion hazard:** Not explosive; Viscosity, dynamic: Not determined:

Oxidizing properties: None.

9.2. Other Information

No data available.

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SECTION 10: Stability and Reactivity

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated (see Heading 7).

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid heating above 85 °C. Ignition sources (sparks, open flame, heated surfaces).

10.5. Incompatible materials

Alkalis, strong oxidizing agents, acid anhydrides.

10.6. Hazardous decomposition products

The product is stable, but heating may release hazardous decomposition products: Br₂, HBr, CNBr, NO_X.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute toxicity

Eye contact. Direct contact with product may cause damage eyes.

Skin contact. Direct contact with product may cause skin irritation. Tests with rabbit: LD50>2000mg/kg.

Ingestion. Tests with rat $LD_{50} = 308 \text{ mg/kg}$.

Inhalation. Toxic by inhalation. Tests with rats LD50 = 0.32 mg / 1 / 4 h.

11.2. Chronic effects

Inhalation. Not volatile.

Carcinogenicity. None.

Mutagenicity. None.

Reproductive toxicity. None.

Contact dermatitis/Sensitizing effect. Allergic and sensitive people may develop dermatitis.

11.3. Medical conditions aggravated by exposure

None.

SECTION 12: Ecological Information

12.1. Toxicity

The product does not have any known adverse effects on the aquatic organisms tested. The addition of large amounts of product to water may cause a fall in pH (acidity).

Aquatic toxicity:

Information about DBNPA (100%):

- 96 hours-LC50, fish 2.3 mg / I Rainbow trout (Salmo gairdneri)
 - 3.4 mg / I dandelion head (Pimephales promelas)
 - 2.3 mg / I blueberry saucer (Lepomis macrochorus)
- 48 hours-EC50, water flea 0.86 mg / I
- 96 hours EC50, eastern oysters 0.37 mg / I
- 96 hours LC50, shrimp 0.72 mg / I
- 72 Hour-EC50, freshwater algae 0.28 mg / l.

12.2. Persistence and degradability

Completely soluble in water.

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12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

Not volatile.

12.5. Results of PBT and vPvB assessment

The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

12.6. Other adverse effects

No data available. Additional advice:

12.7. Additional information

None.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Not classified as harmful to aquatic organisms. Not classified as harmful to birds. Not allowed to dispose of empty containers or waste into the environment. Dispose of according to the local legislation. Empty containers should be returned to the supplier.

SECTION 14: Transport Information

The product is not covered by the international regulation on the transport of dangerous goods (IMDG/ IATA, ADR/RID) and therefore no classification is required. No special precautions are needed apart from those mentioned under Heading 8.

14.1. UN Number

None

14.2. Proper Shipping Name

None.

14.3. Transport hazard class(es)

None.

14.4. Packing Group

None.

14.5. Environmental hazards

Yes. Environmentally hazardous liquid.

14.6. Special precautions for user

None.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

None.

SECTION 15: Regulatory Information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010/EC, Regulation (EC) No 1272/2008 [CLP], Directive 67/548/EEC or 1999/45/EC.

15.2. Chemical Safety Assessment

Chemical Safety Assessment not required.



According to the Regulation No. 1907/2006/EC (REACH) and No. 2015/830/EC

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SECTION 16: Other Information

INCO[®] **515** - For professional use only.

INCO® **515** safety data sheets and technical information developed by the manufacturer.

Full tex of H-Statemens

- H330 Fatal if inhaled.
- H331 Toxic if inhaled.
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H410 Very toxic to aquatic life with long lasting effects.

Abbreviations:

CAS - Chemical Abstracts Service.

EINECS – European Inventory of Existing Chemical Substances.

GHS – Globally Harmonised System of Classification and Labelling of Chemicals

CLP – Classification, labelling and packaging of substances and mixtures.

LC50 - Median lethal dose.

Product INCO® 515 Label

Acute toxicity inhalation 3 H331 Toxic if inhaled. Skin Irritation 2 H315 Causes skin irritation.

Eye Damage 1 H318 Causes serious eye damage. Skin Sensitization 1 H317 May cause an allergic skin reaction.

Aguatic Acute 1 H400 Very toxic to aquatic life.

Pictogram:









Signal Word: Dangerous.

Dangerous components of the mixture: DBNPA.

Hazard Statement:

- H331 Toxic if inhaled.
- H315 Causes skin irritation.
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- H400 Very toxic to aquatic life.

Precautionary Statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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 or doctor/physician.

P273 Avoid release to the environment.

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The information on this data sheet reflects the currently available knowledge and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product, including the use of the product in combination with any other product or any other process, is the responsibility of the user. It is implicite that the user is responsible for determining appropriate safety measures and for applying the legislation covering his own activities. Safety data sheet available for professional user on request.

