

**IN-ECO® 3263**

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: **IN-ECO® 3263**  
Chemical name: Polyamines aqueous solution.

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

Relevant identified uses: Scale and corrosion inhibitor for boiler water treatment. Oxygen binder.

**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](mailto: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  
Fax: 8 5 236 21 42  
E-mail: [info@tox.lt](mailto: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 oral 4	H302	Harmful if swallowed.
Acute Toxicity skin 4	H312	Harmful in contact with skin.
Skin Corrosion 1B	H314	Causes severe skin burns and eye damage.
Eye Damage 1	H318	Causes serious eye damage.
Reproductive toxicity 2	H361	Suspected of damaging fertility or the unborn child.

**2.2. Label elements****According to Regulation (EC) No 1272/2008 [CLP].****Pictogram:****GHS05****GHS08****GHS07****Signal Word:** Danger.**Dangerous components of the mixture:**

Cyclohexylamine, diethylaminoethanol.

**IN-ECO® 3263**

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

Version: 2022-09-07 / EN

**Hazard Statement:**

- H302 Harmful if swallowed.  
 H312 Harmful in contact with skin.  
 H314 Causes severe skin burns and eye damage.  
 H318 Causes serious eye damage.  
 H361 Suspected of damaging fertility or the unborn child.

**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/fume/gas/mist/vapours/spray.  
 P264 Wash hands thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P301+P312+P330 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.  
 P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P363 Wash contaminated clothing before reuse.  
 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.  
 P308+P313 IF exposed or concerned: Get medical advice/attention.  
 P405 Store locked up.  
 P501 Dispose of contents/container to accordance with local regulations.

**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: Polyamine aqueous solution.

CAS No.	EINECS No.	Index No.	REACH Registration No.	Name	Concentration range (%)	Classification according to Regulation (EC) No 1272/2008 [CLP]
3710-84-7	223-055-4	-	01-2119962470-39-0001	Diethylhydroxyl-amine	5 - 10	Flam Liq. 3 H226 Acute Tox. 4 H312 Acute Tox. 4 H332 STOT SE 3 H335 Aquatic Chronic 3 H412
108-91-8	203-629-0	612-050-00-6	01-2119486803-29-0001	Polyamines	20 - 30	Flam. Liq. 3 H226 Repr 2. H361f*** Acute Tox. 4. H312 Acute Tox. 4. H302 Skin Corr. 1B H314
100-37-8	202-845-2		01-2119488937-14-0 001		3 - 5	Flam. Liq. 3 H226 Acute Tox. 4 H302 Acute Tox. 3 H311 Acute Tox. 3 H331 Skin Corr. 1B H314 Eye Dam. 1 H318

For the full text of the H-statements mentioned in the Section 16.

**IN-ECO® 3263**

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

Version: 2022-09-07 / EN

**SECTION 4: First-Aid Measures****4.1. Description of first aid measures**

Remove contaminated clothing.

**If inhaled:**

Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention.

**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:**

Rinse immediately with plenty of water for at least 15 minutes. Immediately obtain medical attention.

**On ingestion:**Immediately rinse mouth and drink at least 1.5 liters of water. Do NOT induce vomiting. Seek medical attention.**4.2. Most important symptoms and effects, both acute and delayed****Both acute symptoms:**

If inhaled: May cause skin irritation.  
On skin contact: May cause skin irritation or corrosion.  
On contact with eyes: Causes serious eye damage.  
On ingestion: Harmful if swallowed.

**Delayed symptoms:**

If inhaled: May cause skin irritation or cough.  
On skin contact: Irritation, redness and skin burns.  
On contact with eyes: Pain, tearing, redness, eye damage.  
On ingestion: Stomach pains.

**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.  
EN 469 - Protective clothing for firemen.**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.

**IN-ECO® 3263**

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

Version: 2022-09-07 / EN

**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**

No special measures necessary provided product is used correctly. In the workplace do not eat, drink or smoke.

Protection against fire and explosion: No special precautions necessary.

**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 35 °C. Away from fire and explosions.

Unsuitable (incompatible) storage of chemicals: strong acids.

**7.3. Specific end use(s)**

Corrosion inhibitor for boiler water treatment.

The concentrated product is dosed using a dosing pump in the system.

**SECTION 8: Exposure Controls/Personal Protection****8.1. Control parameters**

Components with occupational exposure limits: HN 23:2011 Lithuania

Substance		Exposure limits			
Name	CAS No	Long -term effects, mg/l	Long -term effects, ppm	Short-term exposure, mg/l	Short-term exposure, ppm
Polyamine	108-91-8	20	5	40	10

**Information about cyclohexylamine:**

DNEL for workers, oral- acute systemic effects 5,0 mg/kg bw/day

DNEL for workers, inhalation – acute systemic effects 8,2 mg/m<sup>3</sup>

DNEL for workers, skin – acute systemic effects 0,8 mg/kg bw/day

DNEL for workers, inhalation – long-term systemic effects 5,0 mg/m<sup>3</sup>

DNEL for workers, skin – long-term systemic effects 0,4 mg/kg bw/day

**PNEC (cyclohexylamine):**

PNEC Fresh water: 0.016 mg / l

PNEC Seaweed: 0.0016 mg./l

PNEC Sludge (fresh water): 4.1 mg./kg.

PNEC Sludge (seawater): 0.41 mg./kg.

PNEC sewage treatment plant: 22.52 mg./l

PNEC Soil: 0,805 mg./kg

**IN-ECO® 3263**

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

Version: 2022-09-07 / EN

**Information about diethylhydroxylamine CAS No. 3710-84-7.**DNEL for workers, Systemic, long-term, by inhalation: 3.65 mg / m<sup>3</sup>;DNEL for workers, systemic, acute, inhalation: 45.6 mg / m<sup>3</sup>;DNEL for workers, local, long-term, by inhalation: 2.92 mg / m<sup>3</sup>;DNEL for workers, local, short-term, by inhalation: 8.76 mg / m<sup>3</sup>;

DNEL for workers, local, chronic, dermal: 0.26 mg / kg / d;

DNEL for workers, local, short-term, dermal: 4.7 mg / kg / d;

DNEL for users, systemic, prolonged, dermal: 4.7 mg / kg / d;

DNEL for users, systemic, long-term, by inhalation: 3.65 mg / m<sup>3</sup>;**PNEC (DEHA):**

PNEC: Gel water 8.2 µm / l;

PNEC: Sea water 0.82 µm / l

PNEC: Sediment (fresh water) 0,0652 mg / kg;

PNEC: Sediment (sea water) 0.00652 mg / kg;

PNEC: Soil: 0.0082 mg / kg of soil.

**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 with a filter (P2/A type).

**Eye protection.** Wear approved glasses or safety goggles to prevent contact with eyes. (EN 166, EN 402).

**Skin protection.** Wear protective gloves such as Viton, neoprene gloves, polyvinyl alcohol or butadiennitrile 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**

<b>Form:</b>	Liquid;
<b>Colour:</b>	Colorless to yellowish;
<b>Odour:</b>	Weak smell product;
<b>Odour threshold:</b>	Not determined;
<b>pH, (20 °C):</b>	≥12,0;
<b>Melting / freezing point:</b>	-15°C;
<b>Density (20 °C):</b>	0,98 ± 0,05g/cm <sup>3</sup> ;
<b>Solubility:</b>	Soluble in water;
<b>Boiling point/range:</b>	100 ÷ 130 °C;
<b>Flash point:</b>	Not determined;
<b>Evaporation rate:</b>	Not determined;
<b>Flammability:</b>	Not self-igniting;
<b>Partitioning coefficient n-octanol/water (log Kow):</b>	Not applicable;
<b>Self ignition:</b>	Not determined;
<b>Thermal decomposition:</b>	Not determined;
<b>Explosion hazard:</b>	Not explosive;
<b>Viscosity, dynamic:</b>	Not determined;
<b>Oxidizing properties:</b>	None.

**9.2. Other Information**

No data available.

**IN-ECO® 3263**

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

Version: 2022-09-07 / EN

**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**

The heat released by mixing with strong acids (exothermic reaction).

**10.4. Conditions to avoid**

Avoid freezing. Keep away from strong acids.

**10.5. Incompatible materials**

Strong acids, nitrosating agents.

**10.6. Hazardous decomposition products**The product is stable, but heating may release hazardous decomposition products: CO, CO<sub>2</sub>, NO<sub>x</sub>.**SECTION 11: Toxicological Information****11.1. Information on toxicological effects****Acute toxicity****Eye contact.** Direct contact with product may cause eye damage.**Skin contact.** Direct contact with product may cause skin irritation or corrosion. Tests with rabbits: LD50 = 277 mg/kg (Cyclohexylamine), LD50=1300 mg/kg (DEHA). ATE<sub>mix</sub>=1887.**Ingestion.** Harmful if swallowed. Tests with rats: LD50 = 11 mg/kg (Cyclohexylamine). Tests in rats: LD50 = 11 mg/kg. LD50=2190 mg/kg (DEHA). ATE<sub>mix</sub>=1429.**Inhalation.** Not Harmful if inhaled. Tests with rats LD50 = 7.500 mg/m<sup>3</sup>(Cyclohexylamine), LD50= 3140 mg/m<sup>3</sup> (DEHA). ATE<sub>mix</sub>=6.**11.2. Chronic effects****Inhalation.** None.**Carcinogenicity.** None.**Mutagenicity.** None.**Reproductive toxicity.** Suspected reproductive toxicity for human.**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 rise in pH (alkalinity).

Information about cyclohexylamine CAS No. 108-91-8.

Fishes LC50 Leuciscus idus (Golden orfe) 44 mg/l - 96 h

Daphnia and other aquatic invertebrates EC50 Daphnia magna (Dafnija ) 122mg/l - 24 h

Seaweed :EC50 Desmodesmus subspicatus (green algae) 20 mg/l - 96 h

Information about diethylhydroxylamine CAS No. 3710-84-7.

LC50 134 mg / l / 96 h / Pimephales promelas

EC50 8.9 mg / l / 24 h / Daphnia madna

EC50&gt; 101 mg / l / 72 h / Pseudokirchnerella subcapitata

**IN-ECO® 3263**

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

Version: 2022-09-07 / EN

**12.2. Persistence and degradability**

Completely soluble in water.

**12.3. Bioaccumulative potential**

Bioaccumulative potential low.

**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**

Additional advice: No data available.

**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.

Waste codes: 07 01 04 \*; 07 07 04 \* - Other organic solvents, washing liquids and mother liquors  
16 03 05 \* - organic wastes containing dangerous substances**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**

2735.

**14.2. Proper Shipping Name**

Polyamines, liquid, corrosive, n.o.s.

**14.3. Transport hazard class(es)**

8.

**14.4. Packing Group**

III.

**14.5. Environmental hazards**

None.

**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], Regulation No 2015/830/EC.

**15.2. Chemical Safety Assessment**

Chemical Safety Assessment not required.

**IN-ECO® 3263**

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

Version: 2022-09-07 / EN

**SECTION 16: Other Information****IN-ECO® 3263** - For professional use only.**IN-ECO® 3263** - Safety data sheets and technical information developed by the manufacturer.**Full text of H-Statements:**

- H226 Flammable liquid and vapour.  
H302 Harmful if swallowed.  
H311 Toxic in contact with skin.  
H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H331 Toxic if inhaled.  
H335 May cause respiratory irritation.  
H361 Suspected of damaging fertility or the unborn child.  
H412 Harmful 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 – Lethal concentration  
DNEL – Derived no-effect level  
PNEC – Predicted No Effect Concentration.

**Product IN-ECO® 3263 Label**

- Acute Toxicity oral 4  
Acute Toxicity skin 4  
Skin Corrosion 1B  
Eye Damage 1  
Reproductive toxicity 2

**Pictogram:****Signal Word:** Danger.**Dangerous components of the mixture:** Cyclohexylamine, diethylaminoethanol.**Hazard Statement:**

- H302 Harmful if swallowed.  
H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.  
H361 Suspected of damaging fertility or the unborn child.

**IN-ECO® 3263**

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

Version: 2022-09-07 / EN

**Precautionary Statements:**

P201 Obtain special instructions before use.

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

P301+P312+P330 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Rinse mouth.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.

Rinse skin with water/shower.

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.

*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 implicate 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.*

