

Protector H7

ReDiant

1. SECTION

IDENTIFICATION OF SUBSTANCE/ MIXTURE

Product or mixture and company identifier

1.1 Substance/mixture identification:

Product name (synonyms): ReDiant® H7 Central Heating Protector (ReDiant® H7, Protector H7)

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

Neutral scale and corrosion inhibitor for central heating circuits. There are no identified non-recommended uses.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Jurby Water Tech Ltd.
Address: Europos pr. 23, LT-46329, Kaunas
Country: Lithuania
Telephone: +370 37 421401, +370 37 421402, +370 37 421403
Fax: +370 37 421400
e-mail: chemical@jurby.com

1.4 Emergency telephone number

Poison Information and Control Bureau in the Republic of Lithuania (24/7): +370 (5) 2362052, +370 687 53378

2. SECTION

HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation **No. 1272/2008 (EC)**:
Non-hazardous mixture according to the Regulation (EC) **No. 1272/2008**.

2.2 Label elements

Non-hazardous mixture according to the Regulation (EC) **No. 1272/2008**.

Precautionary statements:

P102: Keep out of reach of children.

P103: Read label before use.

Additional labelling elements: Contains a mixture of 5-chloro-2-methyl-2H-isothiazol-3-one [EC No 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC No 220-239-6] (3:1).

2.3 Other risks

The mixture does not contain components that are considered to be persistent, bioaccumulative, and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at concentrations of 0.1% or more.

3. SECTION

COMPOSITION/INFORMATION ON INGREDIENTS

Mixture: aqueous solution

Substance/mixture: Mixture

CAS No./ EC No.	Chemical identification	REACH No.	Conc. (% ww)	Index No.	Classification according to Regulation (EC) No. 1272/2008
102-71-6 / 203-049-8	2,2',2''-nitrilotriethanol	01-2119486482-31-XXXX	10-20	-	Not Classified
10102-40-6/ 600-158-6	Molybdate (MoO4 ²⁻), sodium, hydrate (1:2:2), (T-4)-	01-2119486973-20-xxxx	<5	-	Not Classified

Note: texts of hazard pictograms, hazard and precautionary statements are presented in Sections 2 and 16.

4. SECTION

FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: hardly probable (liquid product).

Skin contact: immediately remove contaminated clothing and wash before re-use. Rinse the skin immediately with lots of water. Seek medical attention if irritation develops and persists.

Eye contact: promptly wash eyes with plenty of water or eye wash solution while lifting the eyelids. If possible, remove any contact lenses and continue to wash. Seek medical attention.

Ingestion: do not induce vomiting. Immediately rinse mouth and drink plenty of water, seek medical advice if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described in the labels see Section 2 and/or in Section 11.

4.3 Indication of any immediate medical attention and special treatment needed: no data.

5. SECTION

FIRE-FIGHTING MEASURES

5.1 Extinguishing media: this material is not combustible. In case of fire in the surroundings: use appropriate extinguishing media.

5.2 Special hazards arising from the substance or mixture: if got into a strong flame, can release carbon oxides, nitrogen oxides (NO_x).

5.3 Advice for firefighters: wear self-contained breathing apparatus and protective suit.

Special firefighting procedures: use standard firefighting procedures and consider the hazards of other involved materials. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6. SECTION

ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency procedures: wear appropriate personal protective equipment as specified in Section 8.

6.2 Environmental precautions: prevent from entering sewers or the environment.

6.3 Methods and material for containment and cleaning up: absorb onto inert material and dispose of according to Hazardous Waste Regulations. Remove small spills with plenty of water.

6.4 Reference to other sections: disposal considerations – see Section 13.

7. SECTION

HANDLING AND STORAGE

7.1 Precautions for safe handling: as with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapours mists/sprays generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

7.2 Conditions for safe storage, including any incompatibilities: store in cool, well-ventilated area. Store between 0–30 °C. Store containers closed when not in use.

Incompatible materials: none.

7.3 Specific end use(s): except as mentioned in Section 1.2 no other specific uses are determined.

8. SECTION

EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limits (TLV, PEL, STEL, TWA) according to Lithuanian regulation HN23:2011:

Chemical substance		Threshold size						Health effect characteristic flags	Notes
		Long-term exposure limit		Short-term exposure limit value		Non-exceedance limit value			
Name	CAS No.	mg/m ³	ppm	mg/m ³	ppm	mg/m ³	ppm		
2,2',2''-nitrilotriethanol	102-71-6	5	-	-	-	-	-	-	-
Molybdate (MoO4 ²⁻), sodium, hydrate (1:2:2), (T-4)-	10102-40-6	5	-	-	-	-	-	-	-

8.2 Exposure controls

- **Engineering measures:** well-ventilated location.
- **Personal Protective Equipment:**
- **Hand protection:** protective rubber or chloroprene rubber or PVC gloves (EN 374-1).
- **Eye/face protection:** if it is necessary – safety glasses, safety goggles, face shield.
- **Skin protection:** normal working clothes.

- **Other information:** do not eat, drink, or smoke during work. Use protective cream. Wash hands before eating. Wash contaminated clothing before reuse.
- **Environmental exposure controls:** do not allow product to enter surface and ground waters.

9. SECTION

PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state (solid, liquid, gas):	liquid
Appearance (colour, odour):	Light yellow to yellow, mild
pH:	7.8 ± 0.5
Freezing point, °C:	- 8
Boiling point/boiling range:	not applicable
Flammability:	not flammable
Viscosity:	not applicable
Relative density, g/cm ³ :	1.11 ± 0.05
Solubility in water:	miscible with water in all proportions

10. SECTION

STABILITY AND REACTIVITY

10.1 Reactivity: stable under recommended transport or storage conditions.

10.2 Chemical stability: product is stable under the conditions specified in Section 7.

10.3 Possibility of hazardous reactions: hazardous reactions will not occur under normal transport or storage conditions.

10.4 Conditions to avoid: high temperatures, flame.

10.5 Incompatible materials: no specific data.

10.6 Hazardous decomposition products: if got into a strong flame, can release carbon oxides, nitrogen oxides. If used properly there is no hazardous components.

11. SECTION

TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

First sensitisation:	no data available.
Irritation:	no data available.
Dissemination:	no data available.
Other toxicological information:	no data available.
Sensitisation:	no data available.

Carcinogenicity, mutagenicity, and reproductive toxicity: not classified as carcinogenic, mutagenic or toxic to reproduction.

12. SECTION

ECOLOGICAL INFORMATION

Properties of the substance or mixture that may affect the environment:

- 12.1 **Toxicity:** no data available.
- 12.2 **Persistence and degradability:** no data available.
- 12.3 **Bio accumulative potential:** no data available.
- 12.4 **Mobility in soil:** completely soluble in water.
- 12.5 **Results of PBT&vPvB assessment:** no data available.
- 12.6 **Other adverse effects:** no data available.

13. SECTION

DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods: dispose of container and unused contents in accordance with federal, state, and local requirements.

Waste: No waste or empty containers may be disposed of in the environment without taking the necessary steps to eliminate their harmful effects on the environment. With the information presented by the supplier, this product is not identified as hazardous or harmful waste, as defined by EC Regulation 91/689/EEC.

Waste code: 16 03 06 organic wastes other than those mentioned in 16 03 05.

Handling contaminated packaging: The accumulation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled.

14. SECTION

TRANSPORT INFORMATION

RID/ADR

The requirements of the European Agreement concerning the International Carriage of Dangerous Goods by Road (RID/ADR), the International Maritime Dangerous Goods Code (IMDG), and the International Air Transport Association (IATA) do not apply.

- 14.1 **UN number:** Not Regulated
- 14.2 **UN proper shipping name:** ReDiant H7
- 14.3 **Transport hazard class(es):** -
- 14.4 **Packaging group:** -
- 14.5 **Environmental hazards:** no data.
- 14.6 **Special precautions for user:** see Section 8.

15. SECTION

REGULATORY INFORMATION

15.1 Safety, health and environmental legislation relating to the substance or mixture:

- **Commission regulation (EU) No 453/2010** of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of chemicals (REACH).
- **Regulation (EC) No 1907/2006** of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
- **Regulation (EC) No 1272/2008** of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
- **Commission Regulation (EU) 2020/878** of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Text with EEA relevance)
- **Rules on the management of packaging and packaging waste** (Approved by Order of the Minister of the Environment No. 348 of 27 June 2002, Official Gazette of the Republic of Lithuania, 2002, No. 81-3503; 2011, No. 28-1353, Lithuania).
- **Waste Management Rules** (Approved by Order of the Minister of the Environment No 722 of 30 December 2003, Žin., 2004, No 68-2381, Lithuania).

15.2 Chemical safety assessment: none.

16. SECTION

OTHER INFORMATION

Text of hazard and precautionary statements are presented in Sections 2 and 3. Further information:

ADR – The European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID – The Regulations concerning the International Carriage of Dangerous Goods by Rail.

PBT - Are substances that are Persistent, Bioaccumulative and Toxic.

vPvB - Substances that are very Persistent and very Bio-accumulative.

Updated on the basis Commission Regulation (EU) No. 878/2020.

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