according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC



Trade name: A.Z. Meisterteile Radiator Cleaner

Version: 1 Latest revision: Date of issue: 12. 12. 2022 Oldal: 1/(12)

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

1.1 Product identifier:

A.Z. Meisterteile Radiator Cleaner

UFI: XYM8-5RH0-3125-34PN

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

Relevant identified uses: Radiator Cleaner. For industrial, professional and residential use.

Uses advised against: application other than the above.

1.3 Details of the supplier of the safety data sheet:

Trader identification: Technical information:

UNIX Autó és Alkatrészkereskedelmi Kft. UNIX Autó és Alkatrészkereskedelmi Kft.

H-1139 Budapest, Frangepán u. 55-57. H-1139 Budapest, Frangepán u. 55-57.

Tel.: +36 1 270 8700

Fax: +36 1 270 8799

E-mail: cs@unixauto.com

Tel.: +36 1 270 8700

Fax: +36 1 270 8799

E-mail: cs@unixauto.com

Responsible for SDS:

UNIX Autó és Alkatrészkereskedelmi Kft. H-1139 Budapest, Frangepán u. 55-57.

Tel.: +36 1 270 8700 Fax: +36 1 270 8799 E-mail: cs@unixauto.com

1.4 Emergency telephone number

Emergency telephone (on workdays: 07-15²⁰ h (CET)): +36 1 270 8700

Health Toxicological Information Service (ETTSZ 1097 Budapest, Albert Flórián st. 2-6.)

Tel.: +36 80 201 199 (0-24 h, free number, can only be called from Hungary). +36 1 476 6464 (0-24 h, can be called for a normal fee - also from abroad)

SECTION 2 Hazards identification

2.1 Classification of the substance or mixture

Hazard Class and Category: Hazard statement:

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

2.2 Label elements

Product identification: Trade name: A.Z. Meisterteile Radiator Cleaner

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC



Trade name: A.Z. Meisterteile Radiator Cleaner

Latest revision: Version: 1 Date of issue: 12. 12. 2022 Oldal: 2/(12)

Hazardous component(s): Orthophosphoric acid

GHS Pictogram:

Danger Signal word:

Hazard statement:

H314 Causes severe skin burns and eye damage.

Supplemental hazard information:

Precautionary statements – General:

If medical advice is needed, have product container or label at hand. P101

Precautionary statements – Prevention:

P262 Do not get in eyes, on skin, or on clothing.

P280 Wear eye/face protection.

Precautionary statements – Response:

P301 + P310IF SWALLOWED: Immediately call a POISON CENTER or

doctor/physician.

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

Rinse skin with water [or shower].

P304 + P340IF INHALED: Remove person to fresh air and keep comfortable for

breathing.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove

+ P310 contact lenses, if present and easy to do. Continue rinsing. Immediately

call a POISON CENTER or doctor/physician.

Precautionary statements – Storage:

Store locked up.

Precautionary statements – Disposal:

P501 Dispose of contents/container in accordance with national regulation.

Other liabilities for labelling:

Tactile warning of danger: not required.

Transport classification: see section 14.

Other hazards 2.3

The product does not contain any PBT or vPvB substance according to annex XIII of regulation (EC) 1907/2006.

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC



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SECTION 3 Composition/information on ingredients

3.2 Mixtures

Chemical description: Mixtures of the following substances and non-hazardous substances.

Component(s) / Hazardous component(s):

Name	EC	CAS	Hazard classes and	Hazard	Conc.
Tunie	number	number	cat.	statements	%(m/m)
Orthophosphoric acid*	231-633-2	7664-38-2	Skin Corr. 1B	H314	33
REACH Registr. Nr.:					
01-2119485924-24					
Triethanolamine	203-049-8	102-71-6	-	-	> 20
REACH Registr. Nr.:					
no data					
Citric acid	691-328-9	5949-29-1	Eye Irrit. 2	H319	> 10
REACH Registr. Nr.:					
no data					

^{*}Specific concentration limit:

Eye Irrit. 2; H319: $10 \% \le C < 25 \%$; Skin Irrit. 2; H315: $10 \% \le C < 25 \%$

Skin Corr. 1B; H314: C ≥ 25 %

The full text of each relevant H- phrase and Hazard classes and cat. see in Section 16.

SECTION 4 First aid measures

4.1 Description of first aid measures

General information: Never give anything by mouth to an unconscious person, or never

induce vomiting. If unconscious, place in recovery position

Inhalation: Remove exposed person to fresh air. In case of complaints, get medical

advice.

Skin contact: Remove contaminated clothing. Wash skin with large amounts of water, use

soap. In case of persistent (irritation, skin redness), contact a doctor.

Eye contact: Flush immediately with plenty of running water for a few minutes, holding

the eyelids open. Remove contact lenses, if present and easy to do. Continue

rinsing. Get medical attention if eye irritation develops or persists.

Ingestion: Rinse mouth thoroughly with water. Do not induce vomiting. In case of

spontaneous vomiting, the head should be turn down. Get immediately

medical attention. Show the MSDS or label to the physician.

Protection of first-aid person: No individual specifications.

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC



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4.2 Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage.

Ingestion: severe laceration of the mouth and throat, risk of perforation of the oesophagus and stomach.

Causes serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Show the MSDS or label to the physician.

SECTION 5 Fire-fighting measures

Fire hazards:

Not flammable.

5.1 Extinguishing media

Suitable extinguishing media:

According to the burning environment: foam, water mist (trained personnel only).

Unsuitable extinguishing media:

Full water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products:

On burning hazardous gases and vapours carbon-dioxide, carbon-monoxide, phosphorus oxides can be formed.

5.3 Advice for fire-fighters

Special protective equipment:

According to the existing fire-fighting regulations. Self-contained breathing apparatus.

Further information:

Collect contaminated fire-fighting water separately. It must not enter the sewage system. Contaminated extinguishing water must be disposed of in accordance with official regulations.

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: see Section 8.

Keep persons not involved in rescue at a distance.

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC



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Sufficient ventilation should be provided.

Avoid contact with skin and eyes, inhalation of vapours.

6.2 Environmental precautions:

Confine spills to prevent material from entering sewers, watercourses, drains and into soil. Notify relevant authority.

6.3 Methods and material for containment and cleaning up

Stop leak if you can do so without risk. Contain spilled liquid with (sand, earth) or other suitable absorbents. Place in properly labelled closed container. Dispose of according to local regulations.

6.4 Reference to other sections

Personal precautions: see section 8.

Waste treatment methods: see section 13.

SECTION 7 Handling and storage

7.1 Precautions for safe handling

Keep general measures applied for normal operations with chemicals.

Sufficient ventilation should be provided.

Avoid mist formation.

Keep containers closed when not in use.

Avoid contact with skin and eyes, inhalation of vapours.

Wash hands before breaks and at end of work.

Take off contaminated clothing and wash it before reuse.

When using do not eat, drink or smoke.

Handling temperature: no data.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool, well-ventilated area, in original, tightly closed containers. Keep away from alkalis.

The floor of storage room should be acid-proof.

Storage tank material: plastic, steel.

Keep away from food, drink.

Keep out of reach of children.

Storage temperature: no data.

7.3 Specific end use(s)

Radiator Cleaner. For industrial, professional and residential use.

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC



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SECTION 8 Exposure controls / personal protection

8.1 Control parameters:

Allowable/tolerable values in working air:

Orthophosphoric 8hr TWA = 1 mg/m^3 ,

acid: $15 \min STEL = 2 \operatorname{mg/m}^3$

CAS: 7664-38-2

8.2 Exposure controls

Engineering control measures:

Adequate ventilation or local exhaust.

Personal protection:

(a) Eye/face protection Protective goggles or face shield if splashes may occur (EN

166).

(b) Skin protection

(i) Hand protection Protective gloves (EN 374).

Material: Butyl, polychloroprene, PVC: Breakthrough time: ≥8 h,

Layer thickness: 0.5 mm

Material: Nitrile: Breakthrough time: ≥8 h, Layer thickness: 0.35

mm

Material: Fluorinated rubber: Breakthrough time: ≥8 h, Layer

thickness: 0.4 mm

Note: Manufacturer's directions for use and the conditions of

application should be observed.

(ii) Other Acid-resistant protective clothing.

(c) Respiratory protection Under normal conditions not required. In case of exceeded

exposure-limits respiratory protection with particle-filter

liquid

(combined filter: B-P2) is recommended.

(d) Thermal hazards No data.

Environmental exposure controls:

Do not discharge into drains/surface waters/groundwater.

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Physical state:

b) Colour: colourless

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC



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characteristic Odour: c)

d) Melting point/freezing point (Pour point): not available

Boiling point or initial boiling point and boiling

not available f) Flammability: not combustible g) Lower and upper explosion limit: not available h) Flash point (closed cup): not available

Auto-ignition temperature: not available i) Decomposition temperature: Orthophosphoric acid: 213°C. i)

pH: 3 - 5k)

1) Kinematic viscosity:

> at 40°C: not available at 100°C: not available

m) Solubility

Solubility in water: soluble in water Solubility in other solvents: not available n) Partition coefficient n-octanol/water (log value): not available

o) Vapour pressure: Orthophosphoric acid: 0.04 hPa

ca. 1.2 g/cm^3 p) Density and/or relative density at 20°C: q) Relative vapour density: not available Particle characteristics: not available r)

9.2 Other information not available

SECTION 10 Stability and reactivity

10.1 Reactivity: Stable under normal conditions.

10.2 Chemical stability: No decomposition if stored and handled properly.

10.3 Possibility of hazardous reactions: Orthophosphoric acid: reacts with metals to produce

hydrogen. Reacts with alkali metals to release heat.

10.4 Conditions to avoid: Direct heat and ignition sources. 10.5 Incompatible materials: Strong oxidizing agents, alkalis.

No dangerous decomposition products are formed under 10.6 Hazardous decomposition products:

normal conditions. Hazardous combustion products: See

Section 5.

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC



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SECTION 11 Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 Acute toxicity: Based on available data, the classification criteria are not met.

Components:

Orthophosphoric acid (CAS: 7664-38-2):

LD₅₀ (rat, female) Oral: 2600 mg/kg **OECD 423**

Dermal: LD₅₀ (rabbit) 2740 mg/kg

Citric acid (CAS: 5949-29-1):

Oral: LD₅₀ (Mouse) 5 400 mg/kg Dermal: LD₅₀ (Mouse) > 2000 mg/kg

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Serious eye damage/irritation: Causes serious eye damage.

Based on available data, the classification criteria are not met. Respiratory or skin sensitisation:

Germ cell mutagenicity: Based on available data, the classification criteria are not met. Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure: Based on available data, the classification criteria are not met.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

11.2 Information on other hazards

No data.

SECTION 12 Ecological information

12.1 Toxicity No data available for the preparation.

Komponensekre:

Orthophosphoric acid (CAS: 7664-38-2):

Fish (Gambusia affinis): LC_{50} 138 mg/l96 h

Fish (Lepomis macrochirus): LC_{50} 3-3.25 mg/l96 h

Daphnia (Daphnia magna): >100 mg/l48 h (OECD 202) EC_{50} Algae (Desmodesmus subspicatus): ErC_{50} >100 mg/l72 h (OECD 201)

Algae (Desmodesmus subspicatus): **NOEC** 100 mg/l72 h (OECD 201)

Activated sludge: EC_{50} 270 mg/l

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC



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Citric acid (CAS: 5949-29-1):

Fish: LC_{50} 440 mg/L 48 h (OECD 203)

Daphnia: LC_{50} 1535 mg/L 24 h

Algae: NOEC 425 mg/L

12.2 Persistence and degradability No data available for the preparation.

Biodegradability: No data available for the preparation.

12.3 Bioaccumulative potential No data available for the preparation.

12.4 Mobility in soil: No data available for the preparation.

Mobility in water: Soluble in water.

12.5 Results of PBT and vPvB assessment Does not contain PBT and vPvB substances.

12.6 Endocrine disrupting properties No data available.

12.7 Other adverse effects No data available. No data available.

Water hazard class (German):

SECTION 13 Disposal considerations

13.1 Waste treatment methods

Product disposal:

Wastes of the product should be treated according to national and local disposal regulations.

Waste Identification Code: 06 01 06*

Other acids

Disposal must be in compliance with national and local regulations.

Recommended waste treatment method: no data

Packaging disposal:

Containers with product residue should also be treated according to national and local disposal regulations.

Waste Identification Code: 15 01 10*

Packaging containing residues of or contaminated by dangerous substances.

Wastewater:

Quality of wastewater emitted to natural water must comply with national and local regulations.

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC



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Care should be taken in any case to ensure compliance with EC, national and local regulations. It is the responsibility of the user to know all relevant national and local regulations.

SECTION 14 Transport information

Land transport:

Road/ Railway ADR/RID: Not classified.

14.1 UN number or ID number: 3264

14.2 UN proper shipping name: CORROSIVE LIQUID, ACIDIC,

INORGANIC, N.O.S. (Orthophosphoric

acid)

14.3 Transport hazard class(es): 8 (Classification code: C1)

14.4 Packing group:

14.5 Environmental hazards: not hazardous for the environment

Marine pollutant: no

14.6 Special precautions for user:

Label: 8
Limited quantities (LQ) / Excepted quantities (EQ): 0/E0
Tunnel restriction code: E

SECTION 15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture. This safety data sheet has been prepared according to Regulation (EC) No 1907/2006 (mod.: 2020/878/EU) and to Regulation (EC) 1272/2008.

Seveso category: not classified.

15.2 Chemical safety assessment.

not available

SECTION 16 Other information

The information given in this data sheet is based on our best knowledge at the time of publication. The information is related only to this product and is intended to assist its safe transport, handling and use. The given physical and chemical parameters describe the product only for the purpose of safety requirements and therefore should not be construed as guaranteeing any specific property of the product or as being part of a product specification or any contract.

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC



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The manufacturer or supplier shall not take responsibility for any damages from the use other than recommended or other misuse of the product. It is the responsibility of the user to keep regulatory precautions and observe recommendations for safe use of the product.

Classification for mixtures and used evaluation method according to regulation 1272/2008/EC

(CLP)

Skin Corr. 1B H314 Calculation method Eye Dam. 1 H318 Calculation method

The full text of each relevant Hazard classes and cat., H- phrase in Section 3.:

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

Skin Corr. 1B Skin corrosion/irritation Category 1B.

Eye Irrit. 2 Serious eye damage/eye irritation Category 2.

Legend:

ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland

Waterways

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

ATE Acute Toxicity Estimate BCF Bioconcentration Factor

Bw Body Weight

C&L Classification and Labelling CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging

CMR Carcinogenic, Mutagenic or toxic to Reproduction

CSA Chemical Safety Assessment
CSR Chemical Safety Report
DMEL Derived Minimal Effect Level
DNEL Derived No Effect Level
ECHA European Chemicals Agency
Ecx Effective Concentration x%

Edx Effective Dose x%

ELINCS European List of Notified Chemical Substances ErC50 EC50 in terms of reduction of growth rate;

ES Exposure Scenario

IARC International Agency for Research on Cancer IATA International Air Transport Association IMDG International Maritime Dangerous Goods

according to regulation (EC) No 1907/2006 (REACH) and 1272/2008/EC



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LCx	Lethal Concentration x%
LDx	Lethal Dose x%
LOAEC	Lowest Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level
LOEC	Lowest Observed Effect Concentration
LOEL	Lowest Observed Effect Level
NOEC	No observed effect concentration
NOEL	No observed effect level
NLP	No-Longer Polymer
NOAEL	No Observed Adverse Effect Level
OECD	Organisation for Economic Cooperation and Development
PBT	Persistent Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SVHC	Substance of Very High Concern
UVCB	substance of unknown or variable composition, complex reaction products or biologic materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bio-accumulative

Section	Subject of change	Date	Version