



MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 6/4/2019 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Product name : MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE
Type of product : Heating system water treatment
Vaporizer : Aerosol

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Water treatment additive.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ADEY Innovation LLP
Head Office, Gloucester Road
GL51 8NR Cheltenham - United Kingdom
T +44 (0)1242 546700 - F +44 (0)1242 546777
www.adey.com

1.4. Emergency telephone number

Emergency number : +44 (0)1242 546700 (8:30 – 5pm) +44 (0)7909 967607 (outside office hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Aerosol, Category 3 H229

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Pressurised container: May burst if heated.

2.2. Label elements

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

Signal word (CLP) : Warning
Hazard statements (CLP) : H229 - Pressurised container: May burst if heated.
Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251 - Do not pierce or burn, even after use.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
EUH-statements : EUH208 - Contains BENZISOTHIAZOLINONE. May produce an allergic reaction.

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|------------------------------|--|-------|---|
| 1,2-benzisothiazol-3(2H)-one | (CAS-No.) 2634-33-5 (EC-No.) 220-120-9 (EC Index-No.) 613-088-00-6 | < 0.1 | Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 |

Specific concentration limits:

| Name | Product identifier | Specific concentration limits |
|------------------------------|--|--------------------------------------|
| 1,2-benzisothiazol-3(2H)-one | (CAS-No.) 2634-33-5 (EC-No.) 220-120-9 (EC Index-No.) 613-088-00-6 | (0.05 =<C < 100) Skin Sens. 1, H317 |

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|---------------------------------------|--|
| First-aid measures general | : If medical advice is needed, have product container or label at hand. |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms occur. |
| First-aid measures after skin contact | : Take off contaminated clothing. Wash skin with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. |
| First-aid measures after eye contact | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion | : Rinse mouth. Do not induce vomiting. Get medical advice/attention. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|-------------------------------------|---|
| Symptoms/effects after inhalation | : In high concentrations, vapours may irritate throat and respiratory system and cause coughing. |
| Symptoms/effects after skin contact | : May cause an allergic skin reaction. irritation (itching, redness, blistering). |
| Symptoms/effects after eye contact | : May cause slight irritation. |
| Symptoms/effects after ingestion | : Ingestion is not considered a potential route of exposure. May cause gastrointestinal irritation, nausea, vomiting and diarrhoea. |

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|------------------------------|--|
| Suitable extinguishing media | : Water spray. Dry powder. Foam. Carbon dioxide. Use extinguishing media appropriate for surrounding fire. |
|------------------------------|--|

5.2. Special hazards arising from the substance or mixture

| | |
|--|---|
| Fire hazard | : The product is not flammable. |
| Explosion hazard | : Pressurised container: May burst if heated. |
| Reactivity in case of fire | : Not known. |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |

5.3. Advice for firefighters

| | |
|--------------------------------|--|
| Precautionary measures fire | : Exercise caution when fighting any chemical fire. |
| Firefighting instructions | : Use extinguishing media appropriate for surrounding fire. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|------------------|-------------------------------------|
| General measures | : Avoid release to the environment. |
|------------------|-------------------------------------|

6.1.1. For non-emergency personnel

| | |
|----------------------|--|
| Protective equipment | : Wear recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : Ventilate spillage area. Stop leak if safe to do so. Avoid contact with skin and eyes. |

6.1.2. For emergency responders

| | |
|----------------------|--|
| Protective equipment | : Wear recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : Ventilate area. Stop leak if safe to do so. Avoid contact with skin and eyes. |

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

| | |
|-------------------------|--|
| For containment | : Collect spillage. |
| Methods for cleaning up | : Take up liquid spill into absorbent material. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). This material and its container must be disposed of in a safe way, and as per local legislation. |
| Other information | : Dispose of in accordance with relevant local regulations. This material and its container must be disposed of as hazardous waste. |

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer to section 13: "Disposal considerations".

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | |
|-----------------------------------|---|
| Additional hazards when processed | : Do not pierce or burn, even after use. |
| Precautions for safe handling | : Ensure adequate ventilation. Wear personal protective equipment. Avoid contact with skin and eyes. Do not pierce or burn, even after use. |
| Hygiene measures | : Always wash hands after handling the product. Do not eat, drink or smoke when using this product. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|----------------------------|--|
| Storage conditions | : Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Store in a well-ventilated place. Keep cool. Keep out of reach of children. |
| Incompatible materials | : Heat sources. |
| Storage area | : Store in a well-ventilated place. |
| Special rules on packaging | : Keep only in original container. |

7.3. Specific end use(s)

No special requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Ensure adequate ventilation.

Personal protective equipment:

Gloves. Safety glasses.

Materials for protective clothing:

Wear suitable working clothes

Hand protection:

Protective gloves. Chemical resistant gloves (according to European standard NF EN 374 or equivalent)

Eye protection:

Safety glasses with side shields. The eye protection to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN 166.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

Consumer exposure controls:

Observe the label precautions. Use as directed on label.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|-----------------|---------------------|
| Physical state | : Liquid |
| Appearance | : Aerosol. |
| Colour | : White/off-white. |
| Odour | : mild. |
| Odour threshold | : No data available |
| pH | : ≥ 7 |

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

| | |
|--|--|
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : 0 °C |
| Freezing point | : No data available |
| Boiling point | : 100 °C |
| Flash point | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Not applicable |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : 1.09 |
| Solubility | : Dispersible. |
| Log Pow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : Product is not explosive. |
| Oxidising properties | : Non oxidizing material according to EC criteria. |
| Explosive limits | : No data available |

9.2. Other information

| | |
|-------------|---|
| VOC content | : According to Swiss ordinance 814.018, we certify that the product mentioned above does not contain any Volatile Organic Compounds (VOC) |
|-------------|---|

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong acids. Strong oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-----------------------------|------------------|
| Acute toxicity (oral) | : Not classified |
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |

| 1,2-benzisothiazol-3(2H)-one (2634-33-5) | |
|---|-----------------------|
| LD50 oral | 1020 mg/kg bodyweight |
| LD50 dermal | 4115 mg/kg bodyweight |
| LC50 inhalation rat (Dust/Mist - mg/l/4h) | 100 mg/l |

| | |
|-----------------------------------|-----------------------------|
| Skin corrosion/irritation | : Not classified pH: ≥ 7 |
| Serious eye damage/irritation | : Not classified pH: ≥ 7 |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Vaporizer

Aerosol

SECTION 12: Ecological information

12.1. Toxicity

| | |
|--------------------------|---|
| Ecology - general | : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. |
| Ecology - water | : The product does not have any known adverse effect on the tested aquatic organisms. |
| Acute aquatic toxicity | : Not classified |
| Chronic aquatic toxicity | : Not classified |

1,2-benzisothiazol-3(2H)-one (2634-33-5)

| | |
|--------------------------------|---------------------|
| LC50 fish 1 | 2.18 mg/l |
| EC50 other aquatic organisms 1 | 2.94 mg/l waterflea |
| EC50 other aquatic organisms 2 | 0.11 mg/l |

12.2. Persistence and degradability

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

| | |
|-------------------------------|--------------------|
| Persistence and degradability | No data available. |
|-------------------------------|--------------------|

12.3. Bioaccumulative potential

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

| | |
|---------------------------|--------------------|
| Bioaccumulative potential | No data available. |
|---------------------------|--------------------|

1,2-benzisothiazol-3(2H)-one (2634-33-5)

| | |
|---------|-----|
| Log Pow | 0.7 |
|---------|-----|

12.4. Mobility in soil

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

| | |
|----------------|----------------------|
| Ecology - soil | Miscible with water. |
|----------------|----------------------|

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

| | |
|------------------------|--------------------------|
| Other adverse effects | : None known. |
| Additional information | : No other effects known |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|--|--|
| Regional legislation (waste) | : Disposal must be done according to official regulations. |
| Waste treatment methods | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Product/Packaging disposal recommendations | : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Container under pressure. Do not drill or burn even after use. |

SECTION 14: Transport information






In accordance with ADR / RID / IMDG / IATA / ADN

| ADR | IMDG | IATA | ADN | RID |
|---|-----------------------|--------------------------------------|-----------------------|-----------------------|
| 14.1. UN number | | | | |
| UN 1950 | UN 1950 | UN 1950 | UN 1950 | UN 1950 |
| 14.2. UN proper shipping name | | | | |
| AEROSOLS | AEROSOLS | Aerosols, non-flammable | AEROSOLS | AEROSOLS |
| Transport document description (ADR) | | | | |
| UN 1950 AEROSOLS, 2.2, (E) | UN 1950 AEROSOLS, 2.2 | UN 1950 Aerosols, non-flammable, 2.2 | UN 1950 AEROSOLS, 2.2 | UN 1950 AEROSOLS, 2.2 |
| 14.3. Transport hazard class(es) | | | | |
| 2.2 | 2.2 | 2.2 | 2.2 | 2.2 |

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

| | | | | |
|---|---|---|---|---|
|  |  |  |  |  |
| 14.4. Packing group | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | Not applicable |
| 14.5. Environmental hazards | | | | |
| Dangerous for the environment : No | Dangerous for the environment : No Marine pollutant : No | Dangerous for the environment : No | Dangerous for the environment : No | Dangerous for the environment : No |
| No supplementary information available | | | | |

14.6. Special precautions for user

Overland transport

| | |
|---|----------------------|
| Classification code (ADR) | : 5A |
| Special provisions (ADR) | : 190, 327, 344, 625 |
| Limited quantities (ADR) | : 1I |
| Excepted quantities (ADR) | : E0 |
| Packing instructions (ADR) | : P207 |
| Special packing provisions (ADR) | : PP87, RR6, L2 |
| Mixed packing provisions (ADR) | : MP9 |
| Transport category (ADR) | : 3 |
| Special provisions for carriage - Packages (ADR) | : V14 |
| Special provisions for carriage - Loading, unloading and handling (ADR) | : CV9, CV12 |
| Tunnel restriction code (ADR) | : E |

Transport by sea

| | |
|-----------------------------------|------------------------------------|
| Special provisions (IMDG) | : 63, 190, 277, 327, 344, 381, 959 |
| Packing instructions (IMDG) | : P207, LP200 |
| Special packing provisions (IMDG) | : PP87, L2 |
| EmS-No. (Fire) | : F-D |
| EmS-No. (Spillage) | : S-U |
| Stowage category (IMDG) | : None |
| Stowage and handling (IMDG) | : SW1, SW22 |
| Segregation (IMDG) | : SG69 |

Air transport

| | |
|--|-------------------------|
| PCA Excepted quantities (IATA) | : E0 |
| PCA Limited quantities (IATA) | : Y203 |
| PCA limited quantity max net quantity (IATA) | : 30kgG |
| PCA packing instructions (IATA) | : 203 |
| PCA max net quantity (IATA) | : 75kg |
| CAO packing instructions (IATA) | : 203 |
| CAO max net quantity (IATA) | : 150kg |
| Special provisions (IATA) | : A98, A145, A167, A802 |
| ERG code (IATA) | : 2L |

Inland waterway transport

| | |
|-----------------------------------|----------------------|
| Classification code (ADN) | : 5A |
| Special provisions (ADN) | : 190, 327, 344, 625 |
| Limited quantities (ADN) | : 1 L |
| Excepted quantities (ADN) | : E0 |
| Equipment required (ADN) | : PP |
| Ventilation (ADN) | : VE04 |
| Number of blue cones/lights (ADN) | : 0 |

Rail transport

| | |
|---------------------------|----------------------|
| Classification code (RID) | : 5A |
| Special provisions (RID) | : 190, 327, 344, 625 |
| Limited quantities (RID) | : 1L |

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

| | |
|---|-----------------|
| Excepted quantities (RID) | : E0 |
| Packing instructions (RID) | : P207, LP200 |
| Special packing provisions (RID) | : PP87, RR6, L2 |
| Mixed packing provisions (RID) | : MP9 |
| Transport category (RID) | : 3 |
| Special provisions for carriage – Packages (RID) | : W14 |
| Special provisions for carriage - Loading, unloading and handling (RID) | : CW9, CW12 |
| Colis express (express parcels) (RID) | : CE2 |
| Hazard identification number (RID) | : 20 |

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

VOC content : According to Swiss ordinance 814.018, we certify that the product mentioned above does not contain any Volatile Organic Compounds (VOC)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

| Full text of H- and EUH-statements: | |
|-------------------------------------|---|
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| Skin Sens. 1 | Skin sensitisation, Category 1 |
| H229 | Pressurised container: May burst if heated. |
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H400 | Very toxic to aquatic life. |
| EUH208 | Contains BENZISOTHIAZOLINONE. May produce an allergic reaction. |

SDS EU (REACH Annex II)

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Legal disclaimer: © ADEY Innovation Limited 2019. All rights reserved. You may use and make a reasonable number of copies of this document for your own internal business purposes only but not otherwise. The commission of any unauthorised act in relation to this document may result in civil or criminal actions being taken against you. We have taken reasonable steps to ensure that, to the best of our knowledge and belief, the information in this document is correct at the time of publication, but please be aware that it may over time become incorrect or out of date. Any hazards detailed herein may not be exclusive and others may exist. The Supplier excludes and disclaims, to the fullest extent allowed by law, any and all liability for the accuracy and/or completeness of the information contained herein and does not assume any such liability. It is the responsibility of the reader/user to assess the suitability of the product referred to for their purposes and to deal with the safe handling, transportation, use, storage and disposal of the same.