



MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 08/01/2023 Revision date: 08/01/2023 Supersedes version of: 13/05/2022 Version: 1.2

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

Supplier

ADEY Innovation Ltd
Unit 2, St Modwen Park Haresfield
Stonehouse – Gloucestershire, GL10 3EZ
United Kingdom
T +44 (0)1242 546717
www.adey.com

Distributor

ADEY Innovation SAS
119 bis, Rue de Colombes, Asnières sur Seine,
92600
France
T +33 (0) 4 5018 3333
www.adey.com

1.4. Emergency telephone number

Emergency number : +44 (0) 1242 5467000 (8:30 – 17:00) +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- and EUH-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 which do not result in classification : None under normal conditions.

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

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 REACH-no: 01-2120761540-60-XXXX	< 0.1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

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 REACH-no: 01-2120761540-60-XXXX	(0.05 ≤C ≤ 100) Skin Sens. 1, H317

Product subject to CLP Article 1.1.3.7. The disclosure rules of the components is modified in this case.

Full text of H- and EUH-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.

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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.

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".

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.

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

1,2-benzisothiazol-3(2H)-one (2634-33-5)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0.966 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	6.81 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	1.2 mg/m ³
Long-term - systemic effects, dermal	0.345 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	4.03 µg/l
PNEC aqua (marine water)	0.403 µg/l
PNEC aqua (intermittent, freshwater)	1.1 µg/l
PNEC aqua (intermittent, marine water)	110 ng/l
PNEC (Sediment)	
PNEC sediment (freshwater)	49.9 µg/kg dw
PNEC sediment (marine water)	4.99 µg/kg dw
PNEC (Soil)	
PNEC soil	3 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	1.03 mg/l

8.1.5. Control banding

No additional information available

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure adequate ventilation.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

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.

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

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

8.2.2.3. Respiratory protection

Respiratory protection:

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

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

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
Colour	: White. Off-white.
Appearance	: Aerosol.
Odour	: slight.
Odour threshold	: Not available
Melting point	: 0 °C
Freezing point	: Not available
Boiling point	: 100 °C
Flammability	: Not applicable
Explosive properties	: Product is not explosive.
Oxidising properties	: Non oxidizing material according to EC criteria.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not applicable
Auto-ignition temperature	: Not available

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Decomposition temperature	: Not available
pH	: ≥ 7
Viscosity, kinematic	: Not available
Solubility	: Dispersible.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 1.09
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

% of flammable ingredients : 0

9.2.2. Other safety characteristics

Miscibility :
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 hazard classes as defined in Regulation (EC) No 1272/2008

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 rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal	4115 mg/kg bodyweight
LC50 Inhalation - Rat	100 mg/l

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

LC50 Inhalation - Rat (Dust/Mist)	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

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

NOAEL (animal/female, F1)	56.6 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: EPA OPPTS 870.3800 (Reproduction and Fertility Effects)
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Vaporizer	Aerosol
-----------	---------

11.2. Information on other hazards

No additional information available

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.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

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

LC50 - Fish [1]	2.18 mg/l
LC50 - Fish [2]	2.15 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	2.94 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	2.9 mg/l Test organisms (species): Daphnia magna
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.
---------------------------	--------------------

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

Partition coefficient n-octanol/water (Log Pow)	1.3
---	-----

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. Endocrine disrupting properties

No additional information available

12.7. 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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID 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
				
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
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
Excepted quantities (RID)	: E0
Packing instructions (RID)	: P207, LP200
Special packing provisions (RID)	: PP87, RR6, L2

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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. Maritime transport in bulk according to IMO instruments

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 substance(s) listed on REACH Annex XVII (Restriction Conditions)

Contains no substance(s) listed on the REACH Candidate List

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

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

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

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

Indication of changes

Section	Changed item	Change	Comments
	Issue date	Added	
	Supersedes version of	Modified	
	Revision date	Modified	
3	Composition/information on ingredients	Modified	
6.3	Other information	Modified	

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
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
EUH208	Contains BENZISOTHIAZOLINONE. May produce an allergic reaction.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H229	Pressurised container: May burst if heated.
H302	Harmful if swallowed.

MC4+ CENTRAL HEATING SYSTEM LEAK SEALER - RAPIDE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:	
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1

Safety Data Sheet (SDS), EU

Legal disclaimer: © ADEY Innovation Limited 2023. 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.