

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

1.1. Product identifier

Product name: MC1+ Central Heating System PROTECTOR

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

Use of substance / mixture: Heating system water treatment

1.3. Details of the supplier of the safety data sheet

Company name: ADEY Innovation Limited,
Head Office,
Gloucester Road,
Cheltenham,
Gloucestershire,
GL51 8NR,
United Kingdom.

Tel: +44 (0)1242 546700

Fax: +44 (0)1242 546777

Email: info@adey.com

1.4. Emergency telephone number

Emergency tel: +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 under CLP: -: EUH208

Most important adverse effects: Contains 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

2.2. Label elements

Label elements:

Hazard statements: EUH208: Contains 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

1,2,3-BENZOTRIAZOLE

EINECS	CAS	PBT / WEL	CLP Classification	Percent
202-394-1	95-14-7	-	Acute Tox. 4: H302; Eye Irrit. 2: H319; Acute Tox. 4: H332	1-10%

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water. If irritation occurs or persists seek medical advice.

Eye contact: Bathe the eye with running water for 15 minutes. If eye irritation occurs or persists seek medical advice.

Ingestion: Wash out mouth with water. Give 1 cup of water to drink every 10 minutes. If large amounts are swallowed, get medical advice.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

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

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: No symptoms.

Delayed / immediate effects: No data available.

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

Immediate / special treatment: Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-side up to prevent the escape of liquid. Avoid contact with the skin or eyes.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Avoid the formation or spread of mists in the air. Avoid contact with skin and eyes. Wash any exposed skin immediately after any chemical contact, before breaks and meals, and at the end of each work period.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC: No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: With normal ventilation and usage, respiratory protection is not required. Do not create and breathe spray mist. If ventilation is insufficient, suitable respiratory protection must be provided.

Hand protection: Protective gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Environmental: No special requirement.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Pale yellow to yellow

Odour: Mild

Evaporation rate: No data available.

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Miscible

Viscosity: No data available.

Boiling point/range°C: No data available.

Flammability limits %: lower: No data available.

Melting point/range°C: No data available.

Flash point°C: No data available.
Autoflammability°C: No data available.
Relative density: 1.12 - 1.16
VOC g/l: No data available.

upper: No data available.
Part.coeff. n-octanol/water: No data available.
Vapour pressure: No data available.
pH: 7.5 - 8.5

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
 Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients: 1,2,3-BENZOTRIAZOLE

DERMAL	RAT	LD50	>1000	mg/kg
ORAL	MUS	LD50	615	mg/kg
ORAL	RAT	LD50	560	mg/kg

Excluded hazards for substance:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	-	No hazard: calculated
Acute toxicity (ac. tox. 3)	-	No hazard: calculated
Acute toxicity (ac. tox. 2)	-	No hazard: calculated
Acute toxicity (ac. tox. 1)	-	No hazard: calculated
Skin corrosion/irritation	-	No hazard: calculated
Serious eye damage/irritation	-	No hazard: calculated

Respiratory/skin sensitisation	-	No hazard: calculated
Germ cell mutagenicity	-	No hazard: calculated
Carcinogenicity	-	No hazard: calculated
Reproductive toxicity	-	No hazard: calculated
STOT-single exposure	-	No hazard: calculated
STOT-repeated exposure	-	No hazard: calculated
Aspiration hazard	-	No hazard: calculated

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: No symptoms.

Delayed / immediate effects: No data available.

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients: 1,2,3-BENZOTRIAZOLE

12.2. Persistence and degradability	Daphnia magna	48H EC50	91	mg/l
	FISH	96H LC50	39	mg/l

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Deposit into or on to land (e.g. landfill, etc.)

Disposal of packaging: Dispose of as normal industrial waste.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

EU legislation: 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 (as amended).

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EC) No 1272/2008.

Phrases used in s.2 and s.3: EUH208: Contains 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

H302: Harmful if swallowed.

H319: Causes serious eye irritation. H332: Harmful if inhaled.

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