

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

1.1. Product identifier

Product name: MCZERO+

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

Use of substance / mixture: Heating system inhibited anti-freeze

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: This product has no classification under CLP.

2.2. Label elements

Label elements:

Precautionary statements: P302+ 350: IF ON SKIN: Gently wash with plenty of soap and water.
P332+313: If skin irritation occurs: Get medical advice/attention.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

2.3. Other hazards

Other hazards: The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies: this preparation or this substance does not meet the criteria for classification according to Regulation 1272/2008/CE

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

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

MONO PROPYLENE GLYCOL – REACH registered number(s): 01-2119456809-23-XXXX

EINECS	CAS	PBT / WEL	CLP Classification	Percent
200-338-0	57-55-6	Substance with a Community workplace exposure limit.	-	>90%

Non-classified ingredients:

BENZOTRIAZOLE – REACH registered number(s): 01-2119979079-20-XXXX

EINECS	CAS	PBT / WEL	CLP Classification	Percent
202-394-1	95-14-7	-	Acute Tox. 4: H302; Eye Irrit. 2: H319; Aquatic Chronic 3: H412	0.1-1%

2-BROMO-2-NITROPROPANE-1,3-DIOL – REACH registered number(s): 01-2119980938-15-XXXX

200-143-0	52-51-7	-	Skin Irrit. 2: H315; Aquatic Chronic 2: H411; Acute Tox. 4: H312; Acute Tox. 4: H302; Eye Dam. 1: H318; STOT SE 3: H335; Aquatic Acute 1: H400	<0.1%
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MIXTURE OF 5-CHLORO-2-METHYL-2H-ISOTHIAZOL-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE

-	55965-84-9	-	Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Acute Tox. 3: H301; Acute Tox. 3: H331; Acute Tox. 3: H311; -: EUH208	<0.1%
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Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water.

Eye contact: Bathe the eye with running water for 15 minutes.

Ingestion: Wash out mouth with water.

Inhalation: 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.

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.

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.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Maintain good person hygiene and housekeeping practices.

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

MONO PROPYLENE GLYCOL

Workplace exposure limits:

Respirable dust:

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	474mg/m ³ (150ppm)	-	-	-

DNEL/PNEC Values

DNEL / PNEC: No data available.

8.2. Exposure controls

Respiratory protection: Respiratory protection is not required.

Hand protection: Protective gloves.

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

Skin protection: Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Blue

Odour: Barely perceptible odour

Solubility in water: Soluble

Boiling point/range °C: 188

pH: 7.0

Relative density: 1.04

Flash point °C: >93

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.

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

Toxicity values:

Route	Species	Test	Value	Units
ORL	RAT	LCLO	>21000	mg/kg

Hazardous ingredients:

MONO PROPYLENE GLYCOL

ORL	RAT	LD50	>20000	mg/kg
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BENZOTRIAZOLE

ORL	RAT	LD50	560	mg/kg
SKN	RBT	LD50	>2000	mg/kg

2-BROMO-2-NITROPROPANE-1,3-DIOL

IHL	RAT	LC50	>5000	mg/M3/6hr
ORL	RAT	LD50	180	mg/kg
SKN	RAT	LD50	1600	mg/kg

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.

Section 12: Ecological information
12.1. Toxicity
Ecotoxicity values:

Species	Test	Value	Units
DAPHNIA	48H EC50	4850-34400	mg/l
FISH	96H LC50	4600-54900	mg/l

Hazardous ingredients:

MONO PROPYLENE GLYCOL

MYSID SHRIMP (Mysidopsis)	96H LC50	800	mg/l
DAPHNIA	48H EC50	340	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC50	40613	mg/l

BENZOTRIAZOLE

BACTERIA	48H EC50	1060	mg/l
ALGAE	72H IC50	231	mg/l
DAPHNIA	48H EC50	91	mg/l
FISH	96H LC50	100	mg/l

12.2. Persistence and degradability
Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

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: Transfer to a suitable container and arrange for collection by specialised disposal company/ Do not allow entry to drains or waterways. Disposal to a special waste disposal plant, in accordance with local council regulations.

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

Specific regulations: Not applicable.

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 (EU) No 2015/830.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: EUH208: Contains a mixture of 5-CHLORO-2-METHYL-2H-ISOTHIAZOL-3-ONE AND 2-METHYL-2H-ISOTHIAZOL-3-ONE. May produce an allergic reaction.

H301: Toxic if swallowed.

H302: Harmful if swallowed.

H311: Toxic in contact with skin.

H312: Harmful in contact with skin.

H314: Causes severe skin burns and eye damage.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H331: Toxic if inhaled.

H335: May cause respiratory irritation.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

H411: Toxic to aquatic life with long lasting effects.

H412: Harmful to aquatic life with long lasting effects.

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