

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name MC1+ Central Heating System PROTECTOR
Product No. MC1P

REACH Registration notes

Substances contained in this product that are not classified as hazardous have been/will be registered for REACH at the appropriate time.

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

Identified uses Corrosion inhibitor, Scale inhibitor

1.3. Details of the supplier of the safety data sheet Supplier

ADEY Innovation LLP
Head Office
Gloucester Road
Cheltenham
Gloucestershire
GL51 8NR
+44 (0)1242 546700
+44 (0)1242 546777
www.adey.com

1.4. Emergency telephone number

Emergency Contact:

+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 (67/548/EEC) Not classified.

Environment

The product is not expected to be hazardous to the environment.

2.2. Label elements

Risk Phrases

NC Not classified.

Safety Phrases

P13 Safety data sheet available for professional user on request.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

BENZOTRIAZOLE	1-5%
CAS-No:	95-14-7
EC No:	202-394-1
Registration Number:	01-02119979079-20
Classification (EC 1272/2008)	
Acute Tox.4-H302	
Eye Irrit. 2-H319	
Aquatic Chronic 3-H412	
Classification (67/548/EEC)	
Xn;R22	
Xi;R36	
R52/53	
MONOPROPYLENE GLYCOL	1-5%
CAS-No:	57-55-6
EC No:	200-338-0
Registration Number:	01-2119456809-23
Classification (EC 1272/2008)	
Not classified	
Classification (67/548/EEC)	
Not classified	
SODIUM HYDROXIDE	<0.1
CAS-No:	1310-73-2
EC No:	215-185-5
Registration Number:	01-2119457892-27
Classification (EC 1272/2008)	
Met. Corr. 1-H290	
Skin Corr. 1A-H314	
Classification (67/548/EEC)	
C;R35	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

REACH Registration notes

Substances contained in this product that are not classified as hazardous have been/will be registered for REACH at the appropriate time.

Composition Comments

This product is not classified as hazardous, the information in this datasheet is given for guidance only.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Get medical attention if any discomfort continues.

Skin contact

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues.

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

Skin contact

Slightly irritating.

Eye contact

May cause temporary eye irritation.

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, **GET MEDICAL ATTENTION PROMPTLY!**

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Specific hazards

Oxides of: Carbon.

5.3. Advice for firefighters

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SAFETY DATA SHEET

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA-8 Hrs		STEL-15 Min	
MONOPRO-PYLENE GLYCOL	WEL	150 ppm	474 mg/m3		
SODIUM HYDROXIDE	WEL				2

WEL = Workplace Exposure Limit.

Ingredient Comments

WEL = Workplace Exposure Limits

SODIUM HYDROXIDE (CAS: 1310-73-2)

Ingredient Comments

WEL = Workplace Exposure Limits

DNEL

Consumer	Inhalation	Long Term	Local Effects	1mg/m3
Industry	Inhalation	Long Term	Local Effects	1mg/m3

MONOPROPYLENE GLYCOL (CAS: 57-55-6)

Ingredient Comments

WEL = Workplace Exposure Limits

DNEL

Industry	Inhalation	Long Term	Systemic Effects	50 mg/m3
Industry	Inhalation	Long Term	Local Effects	10 mg/m3
Consumer	Inhalation	Long Term	Systemic Effects	168 mg/m3
Consumer	Inhalation	Long Term	Systemic Effects	10 mg/m3

PNEC

Freshwater	260	mg/l
Marinewater	26	mg/l

STP	20000	mg/l
Sediment (Freshwater)	572	mg/l
Sediment (Marinewater)	57.2	mg/l
Soil	50	mg/l

DIPROPYLENE GLYCOL (CAS: 25265-71-8)

Ingredient Comments

No exposure limits noted for ingredient(s).

DNEL

Industry	Dermal	Long Term	51 mg/kg/day
Industry	Inhalation	Long Term	70 mg/m3
Industry	Oral	Long Term	24 mg/kg/day
Consumer	Dermal	Long Term	84 mg/kg/day
Consumer	Inhalation	Long Term	238 - mg/m3

PNEC

Freshwater	0.1	mg/l
Marinewater	0.01	mg/l
STP	1000	mg/l
Sediment	0.0238 (Sea sediment)	mg/kg
Sediment	0.238 (Fresh water sediment)	mg/kg
Soil	0.0253	mg/kg

8.2. Exposure controls

Protective equipment



Engineering measures

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of vapours.

Respiratory equipment

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

Hand protection

No specific hand protection noted, but gloves may still be advisable. Use protective gloves made of: Impermeable material.

Eye protection

If risk of splashing, wear safety goggles or face shield.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Appearance	Clear liquid.
Colour	Yellow.
Solubility	Soluble in water.
Relative density	1.1

9.2. Other information

Not determined.

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Not determined.

10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials To Avoid
Not determined.

10.6. Hazardous decomposition products

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Inhalation**

In high concentrations, vapours may irritate throat and respiratory system and cause coughing.

Ingestion

May cause discomfort if swallowed.

Skin contact

Liquid may irritate skin.

Eye contact

Spray and vapour in the eyes may cause irritation and smarting.

SECTION 12: ECOLOGICAL INFORMATION**Ecotoxicity**

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity**Acute Fish Toxicity**

Not considered toxic to fish.

12.2. Persistence and degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

The product is miscible with water. May spread in water systems.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS**General information**

Do not puncture or incinerate even when empty.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

13.2 European Waste Catalogue

16 03 06 Organic wastes other than those mentioned in 16 03 05

SECTION 14: TRANSPORT INFORMATION**General**

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

No information required.

14.2. UN proper shipping name

No information required.

14.3. Transport hazard class(es)

No information required.

14.4. Packing group

No information required.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

No information required.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information required.

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/ legislation specific for the substance or mixture****Statutory Instruments**

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.

Guidance Notes

CHIP for everyone HSG(108).

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION**Revision Comments**

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date	27.03.2014
Revision	01
SDS No.	1
Safety Data Sheet Status	Approved.
Date	24.02.2014
	Mo Jassal

Risk Phrases in Full

NC	Not classified.
R22	Harmful if swallowed.
R35	Causes severe burns.
R36	Irritating to eyes.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements in Full

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

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