SAFETY DATA SHEET



Central Heating Cleaner F3

1. Identification of the preparation and of the company

Product name: Central Heating Cleaner F3

Code : 56600

Head Office: Cookson Electronics

Forsyth Road Sheerwater Woking Surrey England GU21 5RZ

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Contact person : shosken@cooksonelectronics.com

Material uses: Water-boiler treatment.

Manufacturer

: Cookson Electronics Koenendelseweg 29

5222 BG

's-Hertogenbosch The Netherlands Tel: +31 73 6280 111 Fax: +31 73 6219 283

2 Hazards identification

The product is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Not classified.

:

Skin contact : Slightly hazardous by the following route of exposure: of skin contact (irritant).

:

Toxicity data : Not available.

Additional warning phrases: Safety data sheet available for professional user on request.

See section 11 for more detailed information on health effects and symptoms.

3 Composition/information on ingredients

Substance/preparation : Preparation

Ingredient name	CAS number	%	EC number	Classification
Europe				
benzotriazole	95-14-7	1 - 5	202-394-1	Xn; R22 Xi; R36 R52/53
See section 16 for the full text of the R-phrases declared above				

Occupational exposure limits, if available, are listed in section 8.

The classifications listed, indecate the potential hazards of the ingredients

4. First-aid measures

First-aid measures

Inhalation : Keep person warm and at rest. If unconscious, place in recovery position and get

medical attention immediately. The exposed person may need to be kept under

medical surveillance for 48 hours.

Ingestion: Wash out mouth with water. Keep person warm and at rest. If unconscious, place in

recovery position and get medical attention immediately.

Skin contact: Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Get medical attention if symptoms occur.

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4. First-aid measures

Eye contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Protection of first-aiders

Notes to physician

- : No action shall be taken involving any personal risk or without suitable training.
- : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Extinguishing media

Suitable

: Use an extinguishing agent suitable for the surrounding fire.

Not suitable

None known.

Special exposure hazards

: In a fire or if heated, a pressure increase will occur and the container may burst.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

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Hazardous combustion products

: Decomposition products may include the following materials:

carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
phosphorus oxides
halogenated compounds
metal oxide/oxides

Special protective equipment for fire-fighters

 Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode

6. Accidental release measures

Personal precautions

: Do not touch or walk through spilt material. Provide adequate ventilation. Put on appropriate personal protective equipment (see section 8).

Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Large spill

: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small spill

: Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. Handling and storage

Handling

: Put on appropriate personal protective equipment (see section 8). Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container.

Storage

: Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Packaging materials

Recommended: Use original container.

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8. Exposure controls/personal protection

Exposure limit values

Ingredient name

Europe

No exposure limit value known.

Sweden

No exposure limit value known.

Denmark

No exposure limit value known.

Norway

propane-1,2-diol

France

No exposure limit value known.

Netherlands

No exposure limit value known.

Germany

No exposure limit value known.

Finland

No exposure limit value known.

United Kingdom (UK)

propane-1,2-diol

Austria

No exposure limit value known.

Switzerland

No exposure limit value known.

Belgium

No exposure limit value known.

Spain

No exposure limit value known.

Turkey

No exposure limit value known.

Czech Republic

No exposure limit value known.

Ireland

propane-1,2-diol

Italy

No exposure limit value known.

Estonia

No exposure limit value known.

Lithuania

Occupational exposure limits

Arbeidstilsynet (Norway, 11/2007).

TWA: 79 mg/m³ 8 hour(s). TWA: 25 ppm 8 hour(s).

EH40/2005 WELs (United Kingdom (UK), 8/2007).

TWA: 10 mg/m³ 8 hour(s). Form: Particulate

TWA: 474 mg/m³ 8 hour(s). Form: Sum of vapour and particulates TWA: 150 ppm 8 hour(s). Form: Sum of vapour and particulates

NAOSH (Ireland, 8/2007).

OELV-8hr: 10 mg/m³ 8 hour(s). Form: particulate

OELV-8hr: 470 mg/m³ 8 hour(s). Form: vapour and particulates OELV-8hr: 150 ppm 8 hour(s). Form: vapour and particulates

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8. Exposure controls/personal protection

propane-1,2-diol Del Lietuvos Higienos Normos (Lithuania, 10/2007).

TWA: 7 mg/m³ 8 hour(s).

sodium chloride Del Lietuvos Higienos Normos (Lithuania, 10/2007).

TWA: 5 mg/m³ 8 hour(s).

Slovakia

No exposure limit value known.

Hungary

No exposure limit value known.

Poland

No exposure limit value known.

Slovenia

No exposure limit value known.

Latvia

propane-1,2-diol LV Nat. Standardisation and Meterological Centre (Latvia,

5/2007).

TWA: 7 mg/m³ 8 hour(s).

sodium chloride LV Nat. Standardisation and Meterological Centre (Latvia,

5/2007).

TWA: 5 mg/m³ 8 hour(s).

benzotriazole LV Nat. Standardisation and Meterological Centre (Latvia,

5/2007).

TWA: 5 mg/m³ 8 hour(s).

Greece

No exposure limit value known.

Portugal

No exposure limit value known.

Recommended monitoring procedures

: Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Exposure controls

Occupational exposure controls

: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection Hand protection : None assigned.

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. <1 hours (breakthrough time): disposable vinyl

Eye protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

Skin protection

: None assigned.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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9. Physical and chemical properties

General information

Appearance

Physical state : Liquid.

Colour : Clear. Amber.

Odour : Faint

Important health, safety and environmental information

pH : 7 [Conc. (% w/w): 100%]

Boiling point : 100°C (212°F)

Relative density : 1.18

Solubility : Easily soluble in the following materials: cold water and hot water.

VOC content : 0 % (w/w) [ISO % 11890-2]

10. Stability and reactivity

Stability : The product is stable.

Conditions to avoid : No specific data.

Materials to avoid : No specific data.

Hazardous decomposition

products

Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

11. Toxicological information

Potential acute health effects

Inhalation

Exposure to decomposition products may cause a health hazard. Serious effects

may be delayed following exposure.

Ingestion : Acute oral toxicity (LD50) Rat >2000 mg/Kg No known significant effects or critical

hazards

Skin contact
 No known significant effects or critical hazards.
 Eye contact
 No known significant effects or critical hazards.

Acute toxicity

Over-exposure signs/symptoms

Target organs : Contains material which may cause damage to the following organs: skin, eyes,

stomach.

12. Ecological information

Aquatic ecotoxicity

Biodegradability

Other adverse effects : No known significant effects or critical hazards.

AOX : The product does not contain organically bound halogens which could lead to an

AOX value in waste water.

13. Disposal considerations

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

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13. Disposal considerations

European waste catalogue

Hazardous waste

(EWC)

: 16 03 06 organic wastes other than those mentioned in 16 03 05

Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

14. Transport information

International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
ADR/RID Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA Class	Not regulated.	-	-	-		-

PG*: Packing group

15. Regulatory information

EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

Risk phrases : This product is not classified according to EU legislation.

Product use : Consumer applications, Industrial applications.

Other EU regulations

Additional warning

phrases

: Safety data sheet available for professional user on request.

Germany

Hazard class for water

: nwg Appendix No. 4

<u>Italy</u>

Emission control directive : Not classified.

16. Other information

Full text of R-phrases referred to in

sections 2 and 3 - Europe

R22- Harmful if swallowed. R36- Irritating to eyes.

R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

Full text of classifications referred to in sections 2 and 3 - Europe

: Xn - Harmful Xi - Irritant

History

Date of printing : 01/10/2012.

Date of issue : 29/03/2012.

Date of previous issue : 20/01/2012.

Version : 8

Prepared by : Simon Hosken

Environmental, Health and Safety Manager

Indicates information that has changed from previously issued version.

References

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16. Other information

The Health and Safety At Work Act 1974, section 6.

Control of Substances Hazardous to Health (CoSHH) Regulations 2002 and its amendments.

Preparation contains soley TSCA and REACh 1907/2006 listed substances.

This safety data sheet has been prepared in accordance with the requirements of the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 which implement EC Directives 1999/45/EC and 2001/58/EC and their amendments.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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