

SAFETY DATA SHEET



Cookson Electronics ASSEMBLY MATERIALS

MB-1 4 Litre

1. Identification of the preparation and of the company

Product name : MB-1 4 Litre**Code** : 23992

Head Office : **Cookson Electronics**
Forsyth Road
Sheerwater
Woking
Surrey
England
GU21 5RZ
Tel: +44(0)1483 758400
Fax: +44(0)1483 728837

Manufacturer : Cookson Electronics
 Koenendelseweg 29
 5222 BG
 's-Hertogenbosch
 The Netherlands
 Tel: +31 73 6280 111
 Fax: +31 73 6219 283

Contact person : shosken@cooksonelectronics.com**Material uses** : Water-boiler treatment.

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 triethanolamine See section 16 for the full text of the R-phrases declared above	102-71-6	1 - 5	203-049-8	Not classified.

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

The classifications listed, indicate the potential hazards of the ingredients

4. First-aid measures

First-aid measures

Inhalation : Keep person warm and at rest. Get medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately.

Ingestion : Wash out mouth with water. Never give anything by mouth to an unconscious person. 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** : No action shall be taken involving any personal risk or without suitable training.
- Notes to physician** : 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.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen 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. 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** : 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** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, 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. 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.

8. Exposure controls/personal protection

Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
Europe	
triethanolamine	ACGIH TLV (United States, 1/2007). TWA: 5 mg/m ³ 8 hour(s).
Sweden	
triethanolamine	AFS (Sweden, 6/2005). STEL: 10 mg/m ³ 15 minute(s). TWA: 5 mg/m ³ 8 hour(s).
Denmark	
triethanolamine	Arbejdstilsynet (Denmark, 4/2005). TWA: 3.1 mg/m ³ 8 hour(s). TWA: 0.5 ppm 8 hour(s).
Norway	
triethanolamine	Arbejdstilsynet (Norway, 10/2003). TWA: 5 mg/m ³ 8 hour(s).
France	
No exposure limit value known.	
Netherlands	
triethanolamine	Nationale MAC-lijst (Netherlands, 1/2004). Notes: TGG: 5 mg/m ³ 8 hour(s). Form: All forms
Germany	
No exposure limit value known.	
Finland	
No exposure limit value known.	
United Kingdom (UK)	
No exposure limit value known.	
Austria	
triethanolamine	GKV_MAK (Austria, 6/2006). STEL: 10 mg/m ³ , 4 times per shift, 15 minute(s). Form: Inhalable fraction STEL: 1.6 ppm, 4 times per shift, 15 minute(s). Form: Inhalable fraction TWA: 5 mg/m ³ 8 hour(s). Form: Inhalable fraction TWA: 0.8 ppm 8 hour(s). Form: Inhalable fraction
Switzerland	
No exposure limit value known.	
Belgium	
triethanolamine	Lijst Grenswaarden / Valeurs Limites (Belgium, 3/2006). TWA: 5 mg/m ³ 8 hour(s).
Spain	
triethanolamine	INSHT (Spain, 1/2007). TWA: 5 mg/m ³ 8 hour(s).
Turkey	
No exposure limit value known.	
Czech Republic	
triethanolamine	178/2001 (Czech Republic, 6/2004). STEL: 10 mg/m ³ 10 minute(s). STEL: 1.64 ppm 10 minute(s). TWA: 5 mg/m ³ 8 hour(s). TWA: 0.82 ppm 8 hour(s).
Ireland	

8. Exposure controls/personal protection

triethanolamine	NAOSH (Ireland, 3/2002). OELV-8hr: 5 mg/m ³ 8 hour(s).
Italy	
triethanolamine	ACGIH TLV (United States, 1/2007). TWA: 5 mg/m ³ 8 hour(s).
Estonia	
triethanolamine	Sotsiaalminister (Estonia, 9/2001). STEL: 10 MG/M3 15 minute(s). TWA: 5 MG/M3 8 hour(s).
Lithuania	
triethanolamine	Del Lietuvos Higienos Normos (Lithuania, 12/2001). STEL: 10 MG/M3 15 minute(s). TWA: 5 MG/M3 8 hour(s).
sebacic acid	Del Lietuvos Higienos Normos (Lithuania, 10/2007). TWA: 4 mg/m ³ 8 hour(s).
Slovakia	
No exposure limit value known.	
Hungary	
No exposure limit value known.	
Poland	
No exposure limit value known.	
Slovenia	
triethanolamine	Uradni list Republike Slovenije (Slovenia, 4/2005). TWA: 5 MG/M3 8 hour(s). Form: Inhalable fraction
Latvia	
sebacic acid	LV Nat. Standardisation and Meterological Centre (Latvia, 5/2007). TWA: 4 mg/m ³ 8 hour(s).
Greece	
No exposure limit value known.	
Portugal	
triethanolamine	Instituto Português da Qualidade (Portugal, 7/2004). TWA: 5 MG/M3 8 hour(s).

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** : Recommended: None assigned.
- Hand protection** : 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

8. Exposure controls/personal protection

- 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** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: 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.

9. Physical and chemical properties

General information

Appearance

- Physical state** : Liquid.
- Colour** : Clear. Yellow.
- Odour** : Mild

Important health, safety and environmental information

- pH** : 7 to 7.8
- Boiling point** : 100°C (212°F)
- Relative density** : 1.021
- Solubility** : Easily soluble in the following materials: cold water and hot water.
- Viscosity** : Kinematic: 0.1 cm²/s (10 cSt)
- Vapour density** : >1 [Air = 1]
- VOC content** : 0 % (w/w)

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** : 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

12. Ecological information

Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
triethanolamine	-	Acute EC50 609.98 to 658.3 mg/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia	48 hours
	-	Acute LC50 11800000 to 13000000 ug/L Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours
	-	Acute LC50 >100000 ug/L Marine water	Crustaceans - Common shrimp, sand shrimp - Crangon crangon	48 hours

Biodegradability

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

AOX : The product contains organically bound halogens and can contribute to the 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.

European waste catalogue (EWC) : 16 03 06 organic wastes other than those mentioned in 16 03 05

Hazardous waste : 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.

Safety phrases : S37- Wear suitable gloves.

Product use : Consumer applications.

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15. Regulatory information

Other EU regulations

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

Germany

Hazard class for water : nwg Appendix No. 4

Italy

Emission control directive : Not classified.

16. Other information

History

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Prepared by : Simon Hosken
 Environmental, Health and Safety Manager

✔ Indicates information that has changed from previously issued version.

References

The Health and Safety At Work Act 1974, section 6.
 Control of Substances Hazardous to Health (CoSHH) Regulations 2002 and its amendments.

Preparation contains solely 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 above-named 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.