

SAFETY DATA SHEET



Alphi 11

1. Identification of the substance/preparation and of the company/undertaking

Product name : Alphi 11
Code : 61033
Head Office : **Cookson Electronics** **Manufacturer** : Cookson Electronics Assembly Materials Group
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Material uses : Water-boiler treatment.

2. Composition/information on ingredients

Substance/preparation : Preparation

Chemical name*	CAS no.	%	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 Limit(s), if available, are listed in Section 8

* The classifications listed, indicate the potential hazards of the ingredients

3. Hazards identification

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

Classification : Not classified.
Skin contact : Slightly hazardous in case of skin contact (irritant).
Toxicity data : Not available.

4. First aid measures

First-Aid measures

General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention.

Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Skin Contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Obtain medical attention.

Eye Contact : Check for and remove any contact lenses. In case of contact, immediately flush eyes with a copious amount of water for at least 15 minutes. Cold water may be used. Obtain medical attention.

5. Fire-fighting measures

- Extinguishing media** : Recommended: alcohol resistant foam, CO₂, powders, water spray.
Not to be used : waterjet.
- Hazardous thermal decomposition products** : These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...).
- Special fire-fighting procedures** : Fire-fighters should wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.
- Protection of fire-fighters** : Be sure to use an approved/certified respirator or equivalent.
- Recommendations** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Appropriate breathing apparatus may be required. Cool closed containers exposed to fire with water. Do not release runoff from fire to sewers or waterways.

6. Accidental release measures

- Personal Precautions** : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Environmental precautions and clean-up methods** : Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and storage

- Handling** : Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapour/spray. If ingested, seek medical advice immediately and show the container or the label.
- Hygiene measures** : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.
- Packaging materials**
- Recommended** : Use original container.

8. Exposure controls/personal protection

- Engineering measures** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.
- Hygiene measures** : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Ingredient name

Occupational exposure limits

Europe

triethanolamine

ACGIH TLV (United States, 9/2004).

TWA: 5 mg/m³ 8 hour(s). Form: All forms

Sweden

triethanolamine

AFS (Sweden, 3/2000).

KTV: 10 mg/m³ 15 minute(s). Form: All forms

NGV: 5 mg/m³ 8 hour(s). Form: All forms

Denmark

triethanolamine

Arbejdstilsynet (Denmark, 10/2002).

GV: 3.1 mg/m³ 8 hour(s). Form: All forms

GV: 0.5 ppm 8 hour(s). Form: All forms

Norway

triethanolamine

Arbejdstilsynet (Norway, 12/2003).

AN: 5 mg/m³ 8 hour(s). Form: All forms

France

Netherlands

triethanolamine

Nationale MAC-lijst (Netherlands, 1/2004). Notes:
TGG: 5 mg/m³ 8 hour(s). Form: All forms

Germany

triethanolamine

TRGS900 MAK (Germany, 9/2003).
TWA: 5 mg/m³ 8 hour(s). Form: Inhalable fraction

Finland

United Kingdom (UK)

propylene glycol

EH40-OES (United Kingdom (UK), 2002). Notes: OES
TWA: 10 mg/m³ 8 hour(s). Form: Particulate
TWA: 474 mg/m³ 8 hour(s). Form: Sum of vapor and particulates
TWA: 150 ppm 8 hour(s). Form: Sum of vapor and particulates

Where a MEL has been assigned, exposure should be reduced as low as is reasonably practicable and should not exceed the MEL.

Austria

triethanolamine

BMWA_MAK (Austria, 12/2003).
STEL: 10 mg/m³ 4 times per shift, 15 minute(s). Form: All forms
STEL: 1.6 ppm 4 times per shift, 15 minute(s). Form: All forms
TWA: 5 mg/m³ 8 hour(s). Form: All forms
TWA: 0.8 ppm 8 hour(s). Form: All forms

Switzerland

Belgium

triethanolamine

Lijst Grenswaarden / Valeurs Limites (Belgium, 10/2003).
TWA: 5 mg/m³ 8 hour(s). Form: All forms

Czech Republic

triethanolamine

178/2001 (Czech Republic, 1/2001).
STEL: 10 mg/m³ 10 minute(s). Form: All forms
STEL: 1.64 ppm 10 minute(s). Form: All forms
TWA: 5 mg/m³ 8 hour(s). Form: All forms
TWA: 0.82 ppm 8 hour(s). Form: All forms

Ireland

propylene glycol

NAOSH (Ireland, 1999).
OELV: 10 mg/m³ 8 hour(s). Form: Particulate
OELV: 470 mg/m³ 8 hour(s). Form: Sum of vapor and particulates
OELV: 150 ppm 8 hour(s). Form: Sum of vapor and particulates

triethanolamine

NAOSH (Ireland, 1/2002).
OELV: 5 mg/m³ 8 hour(s). Form: All forms

Spain

triethanolamine

INSHT (Spain, 10/2004).
VLA-ED: 5 mg/m³ 8 hour(s). Form: All forms

Estonia

triethanolamine

Sotsiaalminister (Estonia, 9/2001).
STEL: 10 mg/m³ 15 minute(s). Form: All forms
TWA: 5 mg/m³ 8 hour(s). Form: All forms

Lithuania

propylene glycol

Del Lietuvos Higienos Normos (Lithuania, 12/2001).
TWA: 7 mg/m³ 8 hour(s). Form: All forms

triethanolamine

Del Lietuvos Higienos Normos (Lithuania, 12/2001).
STEL: 10 mg/m³ 15 minute(s). Form: All forms
TWA: 5 mg/m³ 8 hour(s). Form: All forms

Slovenia

triethanolamine

Uradni list Republike Slovenije (Slovenia, 1/2000).
TWA: 5 mg/m³ 8 hour(s). Form: Inhalable fraction

[Personal protective equipment](#)

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- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Recommended: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hand protection** : Chemical-resistant, impervious gloves or gauntlets complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
<1 hour(s) (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 glasses with side shields EN 166 1F
- 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.
Body: Recommended: lab coat
- Additional Information** : Not available.

9. Physical and chemical properties

General information

Appearance

- Physical state** : Liquid.
- Colour** : Colourless.
- Odour** : Mild

Important health, safety and environmental information

- pH** : 7 (Conc. (% w/w): 100) [Neutral.]
- Boiling point** : 100°C (212°F)
- Melting point** : May start to solidify at 22°C (71.6°F) based on data for: triethanolamine. Weighted average: -57.64°C (-71.8°F)
- Flash point** : The lowest known value is Closed cup: 98.9°C (210°F). (propylene glycol)
- Relative density** : 1.043 (20°C / 68°F)
- Solubility** : Easily soluble in cold water, hot water.
- Viscosity** : Kinematic: 60 cSt
- Vapor density** : The highest known value is 5.14 (Air = 1) (triethanolamine). Weighted average: 2.65 (Air = 1)
- Evaporation rate (butyl acetate = 1)** : The highest known value is 0.36 (water) Weighted average: 0.02 compared to (n-BUTYL ACETATE=1)
- Other information**
- Auto-ignition temperature** : The lowest known value is 371.16°C (700.1°F) (propylene glycol).

10. Stability and reactivity

- Stability** : The product is stable.
- Hazardous decomposition products** : These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...).

11. Toxicological information

Acute toxicity

<u>Ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
triethanolamine	LD50	2200 mg/kg	Oral	Rabbit
	LD50	2200 mg/kg	Oral	Guinea pig
	LD50	5846 mg/kg	Oral	Mouse

Local effects

- Skin irritation** : Slightly hazardous in case of skin contact (irritant).
- Sensitisation** : Slightly hazardous in case of skin contact (sensitiser).
- Toxicity data** : Not available.

Over-exposure signs/symptoms

12. Ecological information

Ecotoxicity data

<u>Ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
triethanolamine	Scenedesmus subspicatus (EC50)	48 hour(s)	470 mg/l
	Pimephales promelas (LC50)	96 hour(s)	11800 mg/l

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

13. Disposal considerations

Methods of disposal ; Waste of residues ; Contaminated packaging : The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. 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.

Waste classification : Not applicable.

European waste catalogue (EWC) : 16 03 06

Hazardous waste : To present knowledge of the supplier, this product is not regarded as hazardous waste as defined by EU Directive 91/689/EC.

14. Transport information

International transport regulations

<u>Regulatory Information</u>	<u>UN number</u>	<u>Proper shipping name</u>	<u>Class</u>	<u>Packing group</u>	<u>Label</u>	<u>Additional Information</u>
ADR/RID Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		-

15. Regulatory information

EU Regulations

- Risk Phrases** : This product is not classified according to the EU regulations.
- Safety Phrases** : S46- If swallowed, seek medical advice immediately and show this container or label.
- Product use** : Classification and labelling have been performed according to EU directives 67/548/EEC, 1999/45/EC, including amendments and the intended use.
- Consumer applications, Industrial applications.
- Additional warning phrases** : Safety data sheet available for professional user on request.
- EC Statistical classification (Tariff Code)** : 32089091

National regulations

Denmark

- Additional warning phrases** : Safety data sheet available for professional user on request.
- Denmark – Cancer risks** : Not available.
- MAL-code** : 00-1
- Denmark – Restrictions on use** : Not to be used by professional users below 18 years of age, see the National Working Environment Authorities Executive Order on young peoples dangerous work.
- Statutory order 517 on aerosols** : Not applicable.

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Netherlands

K-Klasse : K3
CPR : Not regulated.
SHHR : 0ZZ

Germany

Other Regulations TRGS 900
Ordinance on combustible liquids : Class: A III
Technical instruction on air quality control : Class II: 0.19%
Hazard class for water : 1

16. Other information

Full text of R phrases referred to in sections 2 and 3 - Europe : Not applicable.

Full text of classifications referred to in sections 2 and 3 - Europe : Not applicable.

History

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Prepared by : Simon Hosken
Environmental, Health and Safety Manager

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 EINECS 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.

Version 1

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