



4. FIRST-AID MEASURES.

General advice	If any symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.
Skin Contact	After contact with skin, wash immediately with plenty of water. If skin irritation persists, call a physician.
Eye Contact	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice if symptoms persist.
Inhalation	Move to fresh air. If symptoms develop or persist, seek medical advice.
Ingestion	If swallowed, seek medical advice immediately and show this container or label. Rinse mouth with water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.
Notes to Physician	Treat symptomatically.
Protection of First-aiders	Use personal protective equipment.
Aggravated Medical Conditions:	None known. .

5. FIRE-FIGHTING MEASURES.

Flash point:	Greater than 93.3° C (>200° F).
Suitable Extinguishing Media:	As suitable for the surrounding fire.
Extinguishing media which must not be used for safety reasons:	No information available
Specific Hazards Arising from the Chemical:	No information available..
Special protective equipment for fire-fighters	Wear self-contained breathing apparatus and protective clothing appropriate for fighting a chemical fire.
Precautions for fire-fighting	Standard procedure for chemical fires.

6. ACCIDENTAL RELEASE MEASURES.

Personal Precautions:	Ensure adequate ventilation. Avoid contact with the skin and the eyes. Use personal protective equipment.
Environmental Precautions:	Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.
Methods for Cleaning up:	Wear personal protective equipment. Small spillage: Neutralise with water Soak up with inert absorbent material. Pick up and transfer to properly labelled containers for disposal. Large spills: Contain and collect for later disposal according to local, provincial, state or federal regulations.
Methods for Containment:	Prevent further leakage or spillage if safe to do so

7. HANDLING AND STORAGE.

Handling:	Read label before use. Ensure adequate ventilation. Avoid contact with skin and eyes. Do not breathe vapors or spray mist. Do not ingest.
Storage:	Keep containers tightly closed in a cool, well-ventilated place. Store in upright position only Keep in properly labeled containers. Keep out of the reach of children.
Storage Classification	12 (=Non-combustible liquids, following German VCI-concept)

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Chemical Name	EU	Germany TRGS900:	German mak:	France - OEL	Belgium - OEL	Netherlands - OEL
2-aminoethanol 141-43-5	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ Skin	TWA: 2 ppm TWA: 5.1 mg/m ³	MAK: 2 ppm MAK: 5.1 mg/m ³ Peak: 10.2 mg/m ³ Peak: 4 ppm	VLCT: 3 ppm VLCT: 7.6 mg/m ³ = 1 ppm VME restrictive limit 2 752 2 Ethanalamine = 2.5 mg/m ³ VME restrictive limit 2 752 2 Ethanalamine	STEL: 3 ppm STEL: 7.6 mg/m ³ TWA: 1 ppm TWA: 2.5 mg/m ³ Skin	STEL: 7.6 mg/m ³ TWA: 2.5 mg/m ³

Chemical Name	Norway - OEL	UK - OES	Portugal - OEL	Spain - OEL	Sweden - OEL	Austria - OEL
2-aminoethanol 141-43-5	TWA: 1 ppm TWA: 2.5 mg/m ³ Skin	= 3 ppm STEL 2 2093 2 Ethanalamine = 7.6 mg/m ³ STEL 2 2093 2 Ethanalamine = 1 ppm TWA 3 2094 3 Ethanalamine = 2.5 mg/m ³ TWA 3 2094 3 Ethanalamine	STEL: 6 ppm TWA: 3 ppm	VLA-EC: 3 ppm VLA-EC: 7.5 mg/m ³ VLA-ED: 1 ppm VLA-ED: 2.5 mg/m ³	STV: 15 mg/m ³ STV: 6 ppm LLV: 3 ppm LLV: 8 mg/m ³	STEL: 3 ppm STEL: 7.6 mg/m ³ MAK: 1 ppm MAK: 2.5 mg/m ³

Chemical Name	Finland - OEL	Italy - OEL
2-aminoethanol 141-43-5	TWA: 1 ppm TWA: 2.5 mg/m ³ STEL: 3 ppm STEL: 7.6 mg/m ³ Skin	STEL: 3 ppm STEL: 7.6 mg/m ³ TWA: 1 ppm TWA: 2.5 mg/m ³

Occupational exposure controls

Engineering Controls: Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Respiratory Protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required

Eye Protection If splashes are likely to occur, wear:
Safety glasses with side-shields

Hand Protection: For sensitive skin or prolonged use, wear rubber gloves.

Skin and Body Protection: Usual safety precautions while handling the product will provide adequate protection.

Hygiene measures

When using, do not eat, drink or smoke.
Wash hands after use to prevent possible eye and skin irritation from accidental contact with any residue on the hands.

**Environmental exposure controls**

Local authorities should be advised if significant spillages cannot be contained

9. PHYSICAL AND CHEMICAL PROPERTIES.

Physical State:	Liquid.
Appearance:	Clear Liquid.
Colour:	Clear, water white
Odour:	Citrus / Floral.
pH	10.5 - 11.3
Boiling Point/Range:	No information available
Solubility:	Water solubility: completely soluble.
Specific Gravity / Density [g/mL]:	1.000 - 1.010
Flash Point:	> 93.3°C / > 200°F

10. STABILITY AND REACTIVITY.

Stability	Stable under normal conditions.
Conditions to Avoid:	Store away from excessive heat and moisture.
Incompatible Products	<ul style="list-style-type: none">• Do not mix with other household chemicals.• Not suitable for: vitroc ceramic, wooden, hot or damaged surfaces, and halogen hobs.
Hazardous Decomposition Products:	Oxides of carbon and unknown organic compounds.
Polymerization:	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION.



PRODUCT TOXICITY DATA

LD₅₀ Oral: No information available
LD₅₀ Dermal: No information available
LC₅₀ Inhalation (Dust): No information available
LC₅₀ Inhalation (Vapor): No information available

ACUTE EFFECTS::

Eye Irritation None expected during normal use.
May cause eye irritation upon direct contact with eyes.

Skin Irritation None expected during normal conditions of use.

Inhalation None expected during normal conditions of use.

Ingestion Health injuries are not known or expected under normal use.
Do not ingest
See Section 4 for First Aid instructions.

Sensitization Not expected to be a skin sensitizer.

Chronic Effects: No information available.

Specific Effects

Carcinogenic Effects: Not listed as carcinogenic by OSHA, NTP or IARC.

Mutagenic Effects No information available.

Reproductive Toxicity: No information available.

Additional Toxicity Information: Information given is based on data on the components and the toxicology of similar products.

COMPONENT TOXICITY DATA

Chemical Name	CAS-No	LD50 Oral - with units - Rat - mg/kg	LD50 Dermal - With Units - Rat/Rabbit - mg/kg	LC50 Inhalation - With units - Rat/Rabbit
Sodium 4-undecan-3-ylbenzenesulfonate	68411-30-3	404 mg/kg (Rat)		
2-aminoethanol	141-43-5	1720 mg/kg (Rat)	1 mL/kg (Rabbit)	

12. ECOLOGICAL INFORMATION.

ecotoxicity:

PRODUCT TOXICITY DATA

Aquatic toxicity: This product is not classified as an environmental hazard.

COMPONENT TOXICITY DATA

Sodium 4-undecan-3-ylbenzenesulfonate

Freshwater Algae EC50 96 h 9 mg/L
EC50 72 h 11 mg/L
EC50 96 h 4.29 - 12.5 mg/L

Freshwater Fish LC50 96 h Brachydanio rerio 5.1 mg/L
LC50 96 h Brachydanio rerio 0.6-1.9 mg/L
LC50 96 h Lepomis macrochirus 2.2 mg/L
LC50 96 h Pimephales promelas 0.7 mg/L
LC50 96 h Pimephales promelas 3.4 mg/L
LC50 96 h Oncorhynchus mykiss 3.8-6.6 mg/L

Water Flea EC50 48 h 0.63 mg/L

2-aminoethanol

Freshwater Algae EC50 72 h 15 mg/L

Freshwater Fish LC50 96 h Pimephales promelas 227 mg/L
LC50 96 h Brachydanio rerio 3684 mg/L
LC50 96 h Lepomis macrochirus 300-1000 mg/L
LC50 96 h Oncorhynchus mykiss 114-196 mg/L
LC50 96 h Oncorhynchus mykiss >200 mg/L

Microtox EC50 = 12200 mg/L 2 h
EC50 = 13.7 mg/L 30 min

Water Flea EC50 48 h 65 mg/L

Other Information

Ozone depletion potential; ODP; R-11 = 1) No information available.

Global Warming Potential (GWP): No information available.

Additional Ecological Information: Any contained surfactants are ultimately biodegradable according to the EU Detergent Regulation, 648/2004.



13. DISPOSAL CONSIDERATIONS.

Disposal Methods and Containers:	Dispose of according to Local, State and Federal regulations.
Special Precautions for Landfill or Incineration:	No information available
Contaminated Packaging:	For bulk quantities dispose of in accordance with local, regional or national requirements. For further information contact your local waste authority. Empty container can be disposed of as household trash or rinsed and recycled where appropriate.
Further information:	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used. Packaging and container to be recycled only if emptied completely!
EWC waste disposal No:	No information available

14. TRANSPORT INFORMATION.

General remarks	Not classified as dangerous in the meaning of transport regulations.
ICAO	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated
RID	Not regulated
ADR	Not regulated

15. REGULATORY INFORMATION.

Chemical Safety Assessment following regulation 1907/2006/EC: Not relevant.

In accordance with local and national regulations: The product is classified and labelled in accordance with Directive 1999/45/EC, Detergent Regulation (EC) No 648/2004.

Symbol(s)	Not dangerous.
R -phrase(s)	None
S -phrase(s)	S 2 - Keep out of the reach of children S46 - If swallowed, seek medical advice immediately and show this container or label



16. OTHER INFORMATION.

Text of R phrases mentioned in Section 3

- R22 - Harmful if swallowed.
 - R34 - Causes burns.
 - R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.
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This document complements the technical usage instructions but does not replace them. The information contained herein is based on our best current knowledge of the product concerned, and is given in good faith. The attention of recipients is drawn to (amongst other things) the element of risk consequent to use of the product other than that for which it was intended.

In no way does this document remove the need of the recipient of the product to fully understand and apply statutory requirements. It is the recipient's sole responsibility to take due precautions relative to the use made of the product. All information contained herein is only to assist the recipient in fulfilling their statutory duty connected with the use of hazardous materials.

This list of information must not be considered as exhaustive, and does not exonerate the recipient from taking other precautions described in documents other than those mentioned, concerning the storage and use of the product, for which they remain the sole person responsible.