Safety Data Sheet
according to WHS Regulations

Date of issue: 07.11.2026 Version number 32 Revision: 07.11.2026

* 1 Identification

· **Other means of identification**

· **Trade name: Lanadol ABAC**

· **Article number:** 2262
· **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Application of the substance / the mixture**
Disinfectant for outerwear, nursing home ware, protective clothing, and breathing masks. Disinfectant for the rinsing zone in continuous batch washers.

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
· **Manufacturer**
Chemische Fabrik Kreussler & Co. GmbH
Rheingaustraße 87-93, D-65203 Wiesbaden
Tel. +49 (0) 611 9271-0
· **Supplier**
Spencer Systems
2/142 Riverstone Parade
Riverstone NSW 2765
Australia

· **Further information obtainable from:**
Spencer Systems
Daniel Hays
2/142 Riverstone Pde
Riverstone, NSW, 2765
Australia
· **Emergency telephone number:**
+61 (0) 2 9679 1244 (9am – 5pm AEDT)
Poisons information centre – 13 11 26 from anywhere in Australia

* 2 Hazard(s) Identification

· **Classification of the substance or mixture**

Acute toxicity - oral – Category 4	H302 Harmful if swallowed.
Skin corrosion/irritation – Category 1B	H314 Causes severe skin burns and eye damage.
Eye damage/irritation – Category 1	H318 Causes serious eye damage.
Specific target organ toxicity (repeated exposure) – Category 2	H373 May cause damage to the kidneys through prolonged or repeated exposure.
Aquatic Acute 1	H400 Very toxic to aquatic life.
Aquatic Chronic 2	H411 Toxic to aquatic life with long lasting effects.

· **Label elements**
· **GHS label elements**
The product is classified and labelled according to the Globally Harmonised System (GHS).
· **Hazard pictograms**



GHS05 GHS07 GHS08 GHS09

· **Signal word** Danger

· **Hazard-determining components of labelling:**
didecyldimethylammonium chloride (≥50 %)
ethanediol (15-30 %)
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine (≥3-<5 %)
· **Hazard statements**
Harmful if swallowed.

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Causes severe skin burns and eye damage.
May cause damage to the kidneys through prolonged or repeated exposure.
Very toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

· **Precautionary statements**
Avoid release to the environment.
Wear protective gloves / eye protection.
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation occurs: Get medical advice/attention.

· **Other hazards**
The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable
· **vPvB:** Not applicable

* 3 Composition and Information on Ingredients

· **Chemical characterisation: Mixtures**
· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**		
7173-51-5	didecyldimethylammonium chloride Skin corrosion/irritation – Category 1B, H314; Eye damage/irritation – Category 1, H318; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 2, H411; Acute toxicity - oral – Category 4, H302	≥50%
107-21-1	ethanediol Specific target organ toxicity (repeated exposure) – Category 2, H373; Acute toxicity - oral – Category 4, H302	15-30%
2372-82-9	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine Acute toxicity - oral – Category 3, H301; Specific target organ toxicity (repeated exposure) – Category 2, H373; Skin corrosion/irritation – Category 1B, H314; Eye damage/irritation – Category 1, H318; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1)	≥3-<5%
34590-94-8	Dipropylene glycol monomethyl ether Flammable liquids – Category 4, H227	≤1%

· **Ingredients according to detergent regulation EC 648/2004**	
cationic surfactants	≥30%
preservation agents (LAURYLAMINE DIPROPYLENEDIAMINE)	<5%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4 First Aid Measures

· **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Immediately remove any clothing soiled by the product.

· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**
If skin irritation continues, consult a doctor.
Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:**
Call for a doctor immediately.

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Drink plenty of water and provide fresh air. Call for a doctor immediately.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Fire Fighting Measures

· **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
· **Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbon monoxide (CO)
· **Protective equipment:** Use normal protective clothing.
· **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental Release Measures

· **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
· **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

* 7 Handling and Storage

· **Handling:**
· **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· **Information about fire - and explosion protection:** No special measures required.
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required
· **Further information about storage conditions:**
Keep container tightly sealed.
Store under lock and key and with access restricted to technical experts or their assistants only.
· **Storage class:** 8 B
· **Specific end use(s)** No further relevant information available.

* 8 Exposure controls and personal protection

· **Appropriate engineering controls** No further data; see section 7.

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· **Ingredients with limit values that require monitoring at the workplace:**

107-21-1 ethanediol (15-30%)

WES	Short-term value: 104** mg/m³, 40** ppm Long-term value: 10* 52** mg/m³, 20** ppm Sk;*particulate;**vapour

34590-94-8 Dipropylene glycol monomethyl ether (≤1%)

WES	Long-term value: 308 mg/m³, 50 ppm Sk

· **DNELs**

34590-94-8 Dipropylene glycol monomethyl ether

Oral	long term/systemic effects	36 mg/kg (Consumers)
Dermal	long term/systemic effects	121 mg/kg/Day (Consumers)
		283 mg/kg/Day (Workers)
Inhalative	long term/systemic effects	37.2 mg/m³ (Consumers)
		308 mg/m³ (Workers)

· **PNECs**

34590-94-8 Dipropylene glycol monomethyl ether

Aqua	4,168 mg/l (Sewage treatment plant)
	1.9 mg/l (Marine water)
	19 mg/l (Freshwater)
	190 mg/l (sporadische Freisetzung)
Sediment	7.02 mg/kg (Marine water)
	70.2 mg/kg (Freshwater)
Boden	2.74 mg/kg dw (Soil)

· **Additional information:** The lists valid during the making were used as basis.
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Do not eat, drink, smoke or sniff while working.
Keep away from foodstuffs, beverages and food.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
· **Respiratory protection:**
Use suitable respiratory protective device only when aerosol or mist is formed.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
PVC or PE gloves
Recommended thickness of the material: ≥ 0.4 mm
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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· **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Not suitable are gloves made of the following materials:**
Leather gloves
Strong material gloves
· **Eye protection:**



Safety glasses

Tightly sealed goggles
· **Body protection:** Protective work clothing

* 9 Physical and Chemical Properties

· **General Information**	
· **Appearance:**	
· **Form:**	Liquid
· **Colour:**	Light yellow
· **Odour:**	Odourless
· **Odour threshold:**	Not determined
· **pH-value at 20 °C:**	8.6 (1%)
· **Change in condition**	
· **Melting point/freezing point:**	Undetermined
· **Initial boiling point and boiling range:**	Undetermined
· **Flash point:**	Not applicable
· **Flammability**	Not applicable
· **Decomposition temperature:**	Not determined
· **Ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product does not present an explosion hazard.
· **Explosion limits:**	
· **Lower:**	Not determined
· **Upper:**	Not determined
· **Vapour pressure:**	Not determined
· **Density at 20 °C:**	0.93 g/cm³
· **Relative density**	Not determined
· **Vapour density**	Not determined
· **Evaporation rate**	Not determined
· **Solubility in / Miscibility with**	
· **water:**	Fully miscible.
· **Partition coefficient: n-octanol/water:**	Not determined
· **Viscosity:**	
· **Dynamic:**	Not determined
· **Kinematic at 20 °C:**	32 s (DIN 53211/4)

· **Other information**	
· **Particle characteristics**	Not applicable
· **Physical state**	Liquid

* 10 Stability and Reactivity

· **Reactivity** No further relevant information available.
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
No decomposition if used and stored according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.

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· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known.

* 11 Toxicological Information

· **Information on toxicological effects**
· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**		
ATE (Acute Toxicity Estimates)		
Oral	LD-50	330 mg/kg (rat)

7173-51-5 didecyldimethylammonium chloride		
Oral	LD-50	238 mg/kg (rat)
Dermal	LD-50	3,342 mg/kg (rabbit)
107-21-1 ethanediol		
Oral	LD-50	5,840 mg/kg (rat)
Dermal	LD-50	9,530 mg/kg (rabbit)
2372-82-9 N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine		
Oral	LD-50	261 mg/kg (rat) (OECD- Prüfrcihtlinie 401)
34590-94-8 Dipropylene glycol monomethyl ether		
Oral	LD-50	5,135 mg/kg (rat)
Dermal	LD-50	9,510 mg/kg (rab)

· **Primary irritant effect:**
· **Skin corrosion/irritation** Causes severe skin burns and eye damage.
· **Serious eye damage/irritation** Causes serious eye damage.
· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure** May cause damage to the kidneys through prolonged or repeated exposure.
· **Aspiration hazard** Based on available data, the classification criteria are not met.

* 12 Ecological Information

· **Toxicity**

· **Aquatic toxicity:**	
7173-51-5 didecyldimethylammonium chloride	
EC-50 3 h	11 mg/l (Belebtschlamm)
EC-50 48h	0.062 mg/l (Daphnia magna)
LC-50 96h	0.19 mg/l (Pimephales promelas)
NOEC 21 d	0.014 mg/l (Daphnia magna)
NOEC	0.032 mg/l (Brachydanio rerio)
NOEC (33d)	0.032 mg/l (Brachydanio rerio) (OECD 210)
107-21-1 ethanediol	
EC-10 16 h	>10,000 mg/L (Pseudomonas putida)
EC-50 16h	10,000 mg/l (Pseudomonas putida)
EC-50 48h	>10,000 mg/l (Daphnia magna)
EC-50 96h	6,500-13,000 mg/l (Pseudokirchneriella subscapitata)
LC-50 96h	>10,000 mg/l (Pimephales promelas)

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2372-82-9 N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	
EC-50 48h	0.073 mg/l (Daphnia magna)
EC-50 72h	0.012 mg/l (Desmodesmus subspicatus) (OECD-Prüfrichtlinie 201)
LC-50 96h	0.45 mg/l (Regenbogenforelle)
NOEC 21 d	0.024 mg/l (Daphnia magna)
EbC-50 72h	0.012 mg/l (Desmodesmus subspicatus) (OECD- Prüfrichtlinie 201)
34590-94-8 Dipropylene glycol monomethyl ether	
LC-50	>10,000 mg/l (Pimephales promelas)
EC-50	1.919 mg/l (Daphnia magna)

· **Persistence and degradability** No further relevant information available.
· **Behaviour in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Ecotoxical effects:**
· **Remark:** Very toxic for fish
· **Additional ecological information:**
· **General notes:**
The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
Do not allow product to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Also poisonous for fish and plankton in water bodies.
The product may not be released into the environment without control.
Very toxic for aquatic organisms
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable
· **vPvB:** Not applicable
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Dispose of in accordance with Local, State, and Federal Regulations.

· **Uncleaned packaging:**
· **Recommendation:** Packaging may be reused or recycled after cleaning.
· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

* 14 Transport information

· **UN-Number**	
· **ADG, IMDG, IATA**	UN1760
· **UN proper shipping name**	
· **ADG**	1760 CORROSIVE LIQUID, N.O.S. (didecyldimethylammonium chloride)
· **IMDG**	CORROSIVE LIQUID, N.O.S. (didecyldimethylammonium chloride), MARINE POLLUTANT
· **IATA**	CORROSIVE LIQUID, N.O.S. (didecyldimethylammonium chloride)

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· **Transport hazard class(es)**	
· **ADG, IMDG, IATA**	
· **Class**	8 Corrosive substances.
· **Label**	8
· **Packing group**	
· **ADG, IMDG, IATA**	II
· **Environmental hazards:**	Product contains environmentally hazardous substances: didecyldimethylammonium chloride
· **Marine pollutant:**	Yes Symbol (fish and tree)
· **Special marking (ADG):**	Symbol (fish and tree)
· **Special precautions for user**	Warning: Corrosive substances.
· **Hazard identification number (Kemler code):**	80
· **EMS Number:**	F-A,S-B
· **Stowage Category**	B
· **Stowage Code**	SW2 Clear of living quarters.
· **Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable
· **Transport/Additional information:**	
· **ADG**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **Transport category**	2
· **Tunnel restriction code**	E
· **IMDG**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **UN "Model Regulation":**	UN 1760 CORROSIVE LIQUID, N.O.S. (DIDECYLDIMETHYLAMMONIUM CHLORIDE), 8, II, ENVIRONMENTALLY HAZARDOUS

* 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Australian Inventory of Industrial Chemicals**

All ingredients are listed.

· **Standard for the Uniform Scheduling of Medicines and Poisons**

107-21-1	ethanediol	S5, S6, S10

· **Australia: Priority Existing Chemicals**

None of the ingredients is listed.

· **GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

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· **Hazard pictograms**



GHS05 GHS07 GHS08 GHS09

· **Signal word** Danger

· **Hazard-determining components of labelling:**
didecyldimethylammonium chloride (≥50 %)
ethanediol (15-30 %)
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine (≥3-<5 %)

· **Hazard statements**
Harmful if swallowed.
Causes severe skin burns and eye damage.
May cause damage to the kidneys through prolonged or repeated exposure.
Very toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

· **Precautionary statements**
Avoid release to the environment.
Wear protective gloves / eye protection.
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation occurs: Get medical advice/attention.

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** None of the ingredients is listed.
· **Seveso category** E1 Hazardous to the Aquatic Environment
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
NK	≤1

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

* 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
The information of Items 4 through 8 and 10 through 12 partially refers not to the use and the proper application of the product (see Directions for Use/Product Information) but to the release of larger quantities in the case of accidents and irregularities.
The information exclusively describes the safety requirements of the product(s) and is based on the present state of our experience.
Non-ionic tensides can have varying characteristics and classifications despite same CAS-No.

· **Relevant phrases**
H227 Combustible liquid.
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

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H411 Toxic to aquatic life with long lasting effects.

· **Contact:**

· **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flammable liquids – Category 4: Flammable liquids – Category 4
Acute toxicity - oral – Category 3: Acute toxicity – Category 3
Acute toxicity - oral – Category 4: Acute toxicity – Category 4
Skin corrosion/irritation – Category 1B: Skin corrosion/irritation – Category 1B
Eye damage/irritation – Category 1: Serious eye damage/eye irritation – Category 1
Specific target organ toxicity (repeated exposure) – Category 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

· *** Data compared to the previous version altered.**