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1 Identification

- · Product identifier
- · Trade name: Lanadol Aktiv
- · Article number: 2202
- Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- Application of the substance / the mixture
 Special cleaning and fiber protecting agent having a color-stabilizing effect for use in the LANADOL wet
 cleaning process.
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:
- Manufacturer: Chemische Fabrik Kreussler & Co. GmbH Postfach 120454 D-65082 Wiesbaden
- · Supplier:

Kreussler Inc., 6103 Johns Road Suit 7, Tampa, FL 33634, Phone 813-884-1499, Fax 813-884-1599, Internet: www.kreussler.com, e-mail: office-tampa@kreussler.com

· Information department:

Abteilung TQM Herr Heiko Schmidt +49 (0) 611 9271-144 Heiko.Schmidt@kreussler.com • Emergency telephone number: +49 (0) 611 9271-0

2 Hazard(s) identification

· Classification of the substance or mixture

The product is not classified according to the Globally Harmonized System (GHS).

- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
- Information concerning particular hazards for human and environment: The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- · Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Classification system:
- · NFPA ratings (scale 0 4)



· HMIS-ratings (scale 0 - 4)



Other hazards

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

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

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:			
	perfumes	Xi R38-43; N R51/53	≤1%
26027-37-2	Oleicacid Monoethanolamid, ethoxylated	Xi R38	5.0-15%
69011-36-5	Alcohols, C13 branched, ethoxylated	Xi R41	1.0-5.0%
112-34-5	2-(2-butoxyethoxy)ethanol	Xi R36	1.0-5.0%

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

4 First-aid measures

- · Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Rinse with warm water.
- · After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult 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

- · Extinguishing media
- Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.
- · Environmental precautions: Dilute with plenty of water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Reference to other sections
 No dangerous substances are released.
 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

· Precautions for safe handling No special measures required.

• Information about protection against explosions and fires: No special measures required.

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Safety Data Sheet

acc. to OSHA HCS

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- \cdot Conditions for safe storage, including any incompatibilities
- · 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: None.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:
- 112-34-5 2-(2-butoxyethoxy)ethanol (1.0-5.0%)
- TLV Long-term value: 67.5* mg/m³, 10* ppm
 - *Inhalable fraction and vapor
- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:
- The usual precautionary measures for handling chemicals should be followed.
- · Breathing equipment: Not required.
- · Protection of hands:



Protective gloves

- · Material of gloves
- PVC or PE gloves
- Recommended thickness of the material: ≥ 0.4 mm
- · Not suitable are gloves made of the following materials:
- Leather gloves Strong gloves
- Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical properties

Information on basic physical General Information	and chemical properties
Appearance: Form:	Fluid
Color:	Yellow
· Odor:	Characteristic
· pH-value at 20 °C (68 °F):	7.1
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	
· Flash point:	> 100 °C (> 212 °F) (ASTMD93(PMCC))
	(O-astal, -as as as a

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	(Contd. of page 3)
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Vapor pressure:	Not determined.
· Density at 20 °C (68 °F):	1.02 g/cm ³ (8.512 lbs/gal)
 Solubility in / Miscibility with Water: 	Fully miscible.
 · Viscosity: Dynamic: Kinematic at 20 °C (68 °F): 	Not determined. 12 s (DIN 53211/4)
 Solvent content: Organic solvents: Other information 	0.0 % No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- \cdot Thermal decomposition / conditions to be avoided:
- No decomposition if used according to specifications.
- \cdot Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- \cdot Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

¹¹ Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:

26027-37-2 Oleicacid Monoethanolamid, ethoxylated

Oral LD-50 >3000 mg/kg (rat)

157627-86-6 Alcohols C13-C15 branched and linear, ethoxylated

Oral LD-50 >2000 mg/kg (rat)

112-34-5 2-(2-butoxyethoxy)ethanol

- Oral LD-50 3384 mg/kg (rat)
- Dermal LD-50 2700 mg/kg (bunny)

· Primary irritant effect:

- \cdot on the skin: No irritant effect.
- · on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

IARC (International Agency for Research on Cancer)
None of the ingredients is listed.

 NTP (National Toxicology Program)
None of the ingredients is listed.

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· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

· Toxicity

· Aquatic toxicity:		
26027-37-2 Oleicacid Monoethanolamid, ethoxylated		
EC-50 48h	2.4-3.2 mg/l (Daphnia magna) (OECD 202)	
LC-50 96h	4.2-5.1 mg/l (Brachydanio rerio) (OECD 203A)	
157627-86-6 Alcohols C13-C15 branched and linear,ethoxylated		
EC-10	>1000 mg/L (Belebtschlamm)	
EC-50 48h	1-10 mg/l (Daphnia magna) (Literaturangabe)	
EC-50 72h	1 - 10 mg/l (Scenedesmus subspicatus) (Literaturangabe)	
LC-50 96h	1-10 mg/l (Brachydanio rerio)	
112-34-5 2-(2-butoxyethoxy)ethanol		
EC-10 (17 h)	1170 mg/l (Pseudomonas putida)	
EC-50 24h	2850 mg/l (Daphnia magna)	
LC-50 96h	1300 mg/l (Lepomis macrochirus)	
NOEC (96h)	>100 mg/l (Desmodesmus subspicatus)	

• Persistence and degradability No further relevant information available.

• Bioaccumulative potential No further relevant information available.

· Mobility in soil No further relevant information available.

· 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 undiluted product or large quantities of it to reach ground water, water course or sewage system.

The product may not be released into the environment without control.

· 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: Dispose of in accordance with local, state, and federal Regulations.
- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

Transport information		
· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void	
· UN proper shipping name		
· DOT, ADN, IMDG, IATA	Void	
ADR	Void	
		(Contd. on pag

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	(Contd. of p	page 5
· Transport hazard class(es)		
· DOT, ADR, IMDG, IATA		
· Class	Void	
· Label	-	
· ADN/R Class:	Void	
· Packing group		
· DOT, ADR, IMDG, IATA	Void	
· Environmental hazards:		
• Marine pollutant:	No	
· Special precautions for user	Not applicable.	
 Danger code (Kemler): 	-	
· EMS Number:	-	
· Transport in bulk according to Annex	x II of	
MARPOL73/78 and the IBC Code	Not applicable.	

*15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

Section 355	(extremely hazardous substances):
	ngredient is listed.
· Section 313	(Specific toxic chemical listings):
	ngredients is listed.
· TSCA (Toxic	Substances Control Act):
26027-37-2	Oleicacid Monoethanolamid, ethoxylated
157627-86-6	Alcohols C13-C15 branched and linear,ethoxylated
112-34-5	2-(2-butoxyethoxy)ethanol
29911-28-2	Dipropylenglykolbutylether
22042-96-2	Diethylentriamin(pentamethylenphosphonsäure), Natriumsalz
2425-77-6	2-Hexyldecan-1-ol
9000-90-2	Amylase, alpha-
9001-62-1	Lipase, triacylglycerol
	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine
	1,2-benzisothiazol-3(2H)-one
	2-methyl-2H-isothiazol-3-one
7732-18-5	water, distilled, conductivity or of similar purity
· Proposition	65
· Chemicals k	nown to cause cancer:
None of the ir	ngredients is listed.
· Chemicals k	nown to cause reproductive toxicity for females:
None of the ir	ngredients is listed.
· Chemicals k	nown to cause reproductive toxicity for males:
None of the ir	ngredients is listed.
	nown to cause developmental toxicity:
None of the ir	ngredients is listed.
· Cancerogeni	
· EPA (Enviror	nmental Protection Agency)
None of the ir	ngredients is listed.
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	old Limit Value established by ACGIH) ngredients is listed.
•	In Maximum Workplace Concentration)
None of the ir	ngredients is listed.
	lational Institute for Occupational Safety and Health)
	ngredients is listed.
	Ibstances Listings:
	omestic Substances List (DSL):
	Oleicacid Monoethanolamid, ethoxylated
	Alcohols C13-C15 branched and linear,ethoxylated
	2-(2-butoxyethoxy)ethanol
	Dipropylenglykolbutylether
22042-96-2	Diethylentriamin(pentamethylenphosphonsäure), Natriumsalz
0.405 77 0	Copolymer aus 1-Vinylimidazol und 1-Vinyl-2-pyrrolidon
	2-Hexyldecan-1-ol
	Amylase, alpha-
	Lipase, triacylglycerol
	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine
	1,2-benzisothiazol-3(2H)-one
	2-methyl-2H-isothiazol-3-one
	water, distilled, conductivity or of similar purity
	gredient disclosure list (limit 0.1%)
	Oleicacid Monoethanolamid, ethoxylated
	Alcohols C13-C15 branched and linear, ethoxylated
	2-(2-butoxyethoxy)ethanol
	Dipropylenglykolbutylether
22042-96-2	Diethylentriamin(pentamethylenphosphonsäure), Natriumsalz
	Copolymer aus 1-Vinylimidazol und 1-Vinyl-2-pyrrolidon
	2-Hexyldecan-1-ol
	Amylase, alpha-
	Lipase, triacylglycerol
	N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine
	1,2-benzisothiazol-3(2H)-one
	2-methyl-2H-isothiazol-3-one
	water, distilled, conductivity or of similar purity
	gredient disclosure list (limit 1%)
	2-butoxyethoxy)ethanol
 • GHS label elements Void • Hazard pictograms Void • Signal word Void • Hazard statements Void 	
· National reg	ulations:
· Technical in	structions (air):

 Class
 Share in %

 NK
 1,0-5,0

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

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– USA –

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.

 Department issuing SDS: Abteilung TQM Herr Heiko Schmidt +49 (0) 611/9271-144

· Contact: Herr Heiko Schmidt

· Date of preparation / last revision 11/05/2014 / 4

 Abbreviations and acronyms: RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organisation ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists 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) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent • * Data compared to the previous version altered.