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1 Identification

· Product identifier

· Trade name: Clip Combi

· Article number: 2085

· Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

· Application of the substance / the mixture

Concentrated drycleaning detergent with excellent antistatic properties and fragrance for hygienic textile cleaning. Application in perc and hydrocarbon, injection and for charged-system machines. VOC-free.

- · 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

Skin Irrit. 2 H315 Causes skin irritation.

Eye Dam. 1 H318 Causes serious eye damage.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Harmful

Harmful if swallowed.

Irritant

Irritating to skin. Risk of serious damage to eyes.

· Information concerning particular hazards for human and environment:

The product has 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

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



- · Signal word Danger
- · Hazard statements

Causes skin irritation.

Causes serious eye damage.

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· Precautionary statements

Wear protective gloves / eye protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsina.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If on skin: Wash with plenty of water.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 2Fire = 1

· 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/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:		
	perfumes Xi R43; N R51/53	≤0.1%
69011-36-5	alcohols C13 branched, ethoxylated Xn R22; Xi R36/38	15-30%
1322-98-1	Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salt Xi R38-41	5.0-15%
112-34-5	2-(2-butoxyethoxy)ethanol Xi R36	5.0-15%
68425-47-8	Soyafattyacid-diethanolamide Xi R38-41	5.0-15%
9004-82-4	Fatty alcohol ether-sulfate Xi R38-41	1.0-5.0%
157627-86-6	Alcohols C13-C15 branched and linear,ethoxylated Xn R22; Xi R41	1.0-5.0%
61789-77-3	Quaternary ammonium compounds, dicocoalkyldimethyl, chlorides C R34; Xn R22; N R50	1.0-5.0%
111-42-2	2,2'-iminodiethanol Xn R22-48/22; Xi R38-41	≤1%

· 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.

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· After skin contact:

Rinse with warm water.

If skin irritation continues, consult a doctor.

- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: If symptoms persist consult doctor.
- · 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

- · 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: Use normal protective clothing.
- · Additional information Product does not burn

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- · Environmental precautions: 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).

· 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

- · Handling:
- · Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: The product is not flammable.
- · 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 (5.0-15%)

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.

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(Contd. of page 3)

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Do not eat, drink, smoke or sniff while working.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · 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 and of General Information Appearance: 	chemical properties
Form:	Fluid
Color:	Light yellow
· Odor:	Characteristic
· Odour threshold:	Not determined.
· pH-value at 20 °C (68 °F):	7.9
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	Undetermined. Undetermined.
· Flash point:	> 100 °C (> 212 °F) (ASTMD93(PMCC))
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	
Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Undetermined.

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• **Density at 20 °C (68 °F):** 1.01 g/cm³ (8.428 lbs/gal)

Relative density
 Vapour density
 Evaporation rate
 Not determined.
 Not determined.

· Solubility in / Miscibility with

Water: Fully miscible.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

Dynamic at 20 °C (68 °F): 150 mPas Kinematic: Not determined.

· Solvent content:

Organic solvents: 0.4 %

• Other information No further relevant information available.

* 10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- · 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:

Acute	Additionally.		
· LD/LC50 values that are relevant for classification:			
69011-36-5 alcohols C13 branched, ethoxylated			
Oral	LD-50	500-2000 mg/kg (rat)	
1322-98	1322-98-1 Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salt		
Oral	LD-50	2000 - 5000 mg/kg (rat) (OECD 401)	
Dermal	LD-50	>2000 mg/kg (rat) (OECD 402)	
112-34-	5 2-(2-k	outoxyethoxy)ethanol	
Oral	LD-50	3384 mg/kg (rat)	
Dermal	LD-50	2700 mg/kg (bunny)	
68425-4	68425-47-8 Soyafattyacid-diethanolamide		
Oral		19700 mg/kg (rat)	
9004-82	2-4 Fatt	y alcohol ether-sulfate	
Oral	LD-50	>10000 mg/kg (rat)	
Dermal	LD-50	>2000 mg/kg (rat)	
157627-	157627-86-6 Alcohols C13-C15 branched and linear,ethoxylated		
Oral	LD-50	>2000 mg/kg (rat)	
61789-7	61789-77-3 Quaternary ammonium compounds, dicocoalkyldimethyl, chlorides		
Oral	LD-50	300 - 2000 mg/kg (rat) (OECD-Prüfrichtlinie 401)	
	111-42-2 2,2'-iminodiethanol		
		710 mg/kg (rat)	
Dermal	LD-50	12200 mg/kg (bunny)	

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- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Strong irritant with the danger of severe eye injury.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful Irritant

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)		
	propan-2-ol	3
111-42-2	2,2'-iminodiethanol	2B
· NTP (National Toxicology Program)		
None of the ingredients is listed.		
· OSHA-Ca (Occupational Safety & Health Administration)		
None of the ingredients is listed.		

12 Ecological information

· Toxicity

Aquatic toxicity	y: phols C13 branched, ethoxylated
LC-50 96h	1-10 mg/l (Leuciscus idus)
	,
	enesulfonic acid, C10-13 alkyl derivatives, sodium salt
EC-50 48h	>1-10 mg/l (Daphnia magna) (OECD 202, Teil 1)
EC-50 72h	>10-100 mg/l (Desmodesmus subspicatus) (OECD 201)
LC-50 96h	>1-10 mg/l (Cyprinus carpio) (OECD 203; ISO 7346; 92/69/EWG, C.1)
NOEC (21) d	> 1 - 10 mg/l (Daphnia magna) (OECD 211)
NOEC (72 d)	> 0.1 - 1 mg/L (Oncorhynchus mykiss) (Durchflusstest)
•	utoxyethoxy)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)
68425-47-8 Soy	afattyacid-diethanolamide
EC-50	> 100 mg/l (Pseudomonas putida)
LC-50	>1 -10 mg/l (Pseudomonas putida)
157627-86-6 Ald	cohols 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)
61789-77-3 Qua	nternary ammonium compounds, dicocoalkyldimethyl, chlorides
EC-50 3 h	> 10 - 100 mg/l (Belebtschlamm)
EC-50 72h	> 0.1 - 1 mg/l (Pseudokirchneriella subscapitata) (OECD-Prüfrichtlinie 201)
LC-50 48 h	>0.1-1 mg/L (Acartia Tonsa)
LC-50 96h	> 0.1 - 1 mg/l (Brachydanio rerio) (OECD-Prüfrichtlinie 203)
111-42-2 2,2'-im	ninodiethanol
EC-50 16h	>1000 mg/l (Pseudomonas putida)

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EC-50 48h (static) 55 mg/l (Daphnia magna)

EC-50 96h (static) 1-10 mg/l (Pseudokirchneriella subscapitata)

LC-0 0.2 mg/l (rat) >100 mg/l (Pimephales promelas)

NOEC (21) d 0.1-1 mg/l (Daphnia magna)

- · Persistence and degradability No further relevant information available.
- · Other information: The product is biodegradable.
- · Behavior in environmental systems:
- · 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 product 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.

14 Transport information

•	
· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void
UN proper shipping nameDOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, ADR, ADN, IMDG, IATA · Class	Void
· Packing group · DOT, ADR, IMDG, IATA	Void
Environmental hazards:Marine pollutant:	No
· Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	of Not applicable.
· UN "Model Regulation":	-

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15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredient is listed.

Section 313 (Specific toxic chemical listings):

67-63-0 propan-2-ol

111-42-2 2,2'-iminodiethanol

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65
- · Chemicals known to cause cancer:

111-42-2 2,2'-iminodiethanol

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Cancerogenity categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

67-63-0 propan-2-ol A4
111-42-2 2,2'-iminodiethanol A3

· MAK (German Maximum Workplace Concentration)

111-42-2 2,2'-iminodiethanol

3B

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- · Canadien Substances Listings:
- · Canadien Domestic Substances List (DSL):

All ingredients are listed.

· Canadien Ingredient disclosure list (limit 0.1%)

All ingredients are listed.

· Canadien Ingredient disclosure list (limit 1%)

1322-98-1 Benzenesulfonic acid, C10-13 alkyl derivatives, sodium salt

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

GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard statements

Causes skin irritation.

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Causes serious eye damage.

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· Precautionary statements

Wear protective gloves / eye protection.

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. If eve irritation persists: Get medical advice/attention.

If on skin: Wash with plenty of water.

- · 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.

Department issuing SDS:

Departent TQM Herr Heiko Schmidt +49 (0) 611/9271-144

· Contact: Herr Heiko Schmidt

· Date of preparation / last revision 04/30/2015 / 4

· Abbreviations and acronyms:

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

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

· * Data compared to the previous version altered.

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