

Safety Data Sheet

acc. to OSHA HCS

Printing date 06/20/2013

Reviewed on 06/20/2013

* 1 Identification

- **Product identifier**
- **Trade name:** ClipK4
- **Article number:** 2197
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation**
Drycleaning detergent for dry cleaning machinery in SYSTEMK4 (patent pending)
- **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 Vogel
+49 (0) 611 9271-175
Kurt.Vogel@kreussler.com
- **Emergency telephone number:** +49 (0) 611 9271-0

* 2 Hazard(s) identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
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

- **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with directives on hazardous materials.
- **Code letter and hazard designation of product:**



Xi Irritant

- **Risk phrases:**
Irritating to skin.
Risk of serious damage to eyes.
- **Safety phrases:**
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear suitable protective clothing, gloves and eye/face protection.
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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- **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.

- **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%
69011-36-5	Alcohols, C13 branched, ethoxylated Xi R41	15-30%
106232-83-1	Alcohols C13-C15 branched and linear, ethoxylated Xn R22; Xi R41	5.0-15%
112-34-5	2-(2-butoxyethoxy)ethanol Xi R36	5.0-15%
577-11-7	Sulfosuccinat-sodiumsalt Xi R38-41	5.0-15%
69227-21-0	alcohols C12 – C18 ethoxylated, propoxylated Xi R38; N R50	5.0-15%
9004-82-4	Fettalkoholethersulfat Xi R38-41	5.0-15%
68425-47-8	Soyafattyacid-diethanolamide Xi R38-41	5.0-15%
69227-21-0	alcohols C12 – C18 ethoxylated, propoxylated Xi R38	5.0-15%
63449-41-2	quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides C R34; Xn R21/22; N R50	5.0-15%
69011-36-5	alcohols C13 branched, ethoxylated Xn R22; Xi R36/38	1.0-5.0%
61789-77-3	Quaternary ammonium compounds, dicocoalkyldimethyl, chlorides C R34; Xn R22; N R50	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:** Seek medical treatment in case of complaints.

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- **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:** 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 fire with 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.

* 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 measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **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/m ³ , 10* ppm
	*Inhalable fraction and vapor

- **Additional information:** The lists that were valid during the creation were used as basis.

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- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Be sure to clean skin thoroughly after work and before breaks.
Do not eat, drink, smoke or sniff while working.
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 chemical properties	
· General Information	
· Appearance:	
Form:	Fluid
Color:	Light yellow
· Odor:	Pleasant
· pH-value at 20 °C (68 °F):	8.6
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)
· Flash point:	> 100 °C (> 212 °F) (ASTMD93(PMCC))
· 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):	1.01 g/cm ³ (8.428 lbs/gal)
· Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
· Viscosity:	
Dynamic:	Not determined.
Kinematic at 20 °C (68 °F):	35 s (DIN 53211/4)

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- **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:**

- **LD/LC50 values that are relevant for classification:**

69011-36-5 Alcohols, C13 branched, ethoxylated

Oral LD-50 > 5000 mg/kg (rat)

106232-83-1 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)

577-11-7 Sulfosuccinat-sodiumsalt

Oral LD-50 1900 mg/kg (rat)

69227-21-0 alcohols C12 – C18 ethoxylated, propoxylated

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

9004-82-4 Fettalkoholethersulfat

Oral LD-50 >10000 mg/kg (rat)

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

68425-47-8 Soyafattyacid-diethanolamide

Oral LD-50 19700 mg/kg (rat)

69227-21-0 alcohols C12 – C18 ethoxylated, propoxylated

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

63449-41-2 quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides

Oral LD-50 240 mg/kg (rat)

Dermal LD-50 1560 mg/kg (rat)

69011-36-5 alcohols C13 branched, ethoxylated

Oral LD-50 500-2000 mg/kg (rat)

61789-77-3 Quaternary ammonium compounds, dicocoalkyldimethyl, chlorides

Oral LD-50 300 - 2000 mg/kg (rat) (OECD-Prüfrichtlinie 401)

- **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.

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- **Additional toxicological information:**

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

Irritant

- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
67-63-0	propan-2-ol	3
111-42-2	2,2'-iminodiethanol	3
· NTP (National Toxicology Program)		
None of the ingredients is listed.		

* 12 Ecological information

- **Toxicity**

· Aquatic toxicity:	
69011-36-5 Alcohols, C13 branched, ethoxylated	
EC-10 (17 h)	>2500 mg/l (Belechtschlamm) (DIN 38412 Teil 8)
EC-50 48h	1-10 mg/l (Daphnia magna)
LC-50 96h	1-10 mg/l (Leuciscus idus)
106232-83-1 Alcohols C13-C15 branched and linear, ethoxylated	
EC-10	>1000 mg/L (Belechtschlamm)
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)
69227-21-0 alcohols C12 – C18 ethoxylated, propoxylated	
LC-50 96h	1-10 mg/l (Leuciscus idus)
NOEC 21,0 d	0.25 mg/l (Daphnia magna)
68425-47-8 Soyafattyacid-diethanolamide	
EC-50	> 100 mg/l (Pseudomonas putida)
LC-50	>1 -10 mg/l (Pseudomonas putida)
69227-21-0 alcohols C12 – C18 ethoxylated, propoxylated	
LC-50 96h	1-10 mg/l (Leuciscus idus)
69011-36-5 alcohols C13 branched, ethoxylated	
LC-50 96h	1-10 mg/l (Leuciscus idus)
61789-77-3 Quaternary ammonium compounds, dicocoalkyldimethyl, chlorides	
EC-50 3 h	> 10 - 100 mg/l (Belechtschlamm)
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)

- **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.

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- **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.

14 Transport information

· UN-Number	
· DOT, ADR, ADN, IMDG, IATA	Void
· UN proper shipping name	
· DOT, 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	Not applicable.

* 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):**

69011-36-5	Alcohols, C13 branched, ethoxylated
106232-83-1	Alcohols C13-C15 branched and linear, ethoxylated
112-34-5	2-(2-butoxyethoxy)ethanol

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577-11-7	Sulfosuccinat-sodiumsalt
9004-82-4	Fettalkoholethersulfat
68425-47-8	Soyafattyacid-diethanolamide
69227-21-0	alcohols C12 – C18 ethoxylated, propoxylated
63449-41-2	quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides
69011-36-5	alcohols C13 branched, ethoxylated
61789-77-3	Quaternary ammonium compounds, dicocoalkyldimethyl, chlorides
7786-30-3	Magnesium chloric hexahydrate
56-81-5	glycerol
67-63-0	propan-2-ol
111-42-2	2,2'-iminodiethanol
7732-18-5	water, distilled, conductivity or of similar purity

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

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

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

106232-83-1	Alcohols C13-C15 branched and linear, ethoxylated
112-34-5	2-(2-butoxyethoxy)ethanol
577-11-7	Sulfosuccinat-sodiumsalt
9004-82-4	Fettalkoholethersulfat
68425-47-8	Soyafattyacid-diethanolamide
69227-21-0	alcohols C12 – C18 ethoxylated, propoxylated
63449-41-2	quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides
69011-36-5	alcohols C13 branched, ethoxylated
61789-77-3	Quaternary ammonium compounds, dicocoalkyldimethyl, chlorides
7791-18-6	Magnesiumchlorid-hexahydrat
7786-30-3	Magnesium chloric hexahydrate
56-81-5	glycerol
67-63-0	propan-2-ol

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111-42-2	2,2'-iminodiethanol
7732-18-5	water, distilled, conductivity or of similar purity
· Canadien Ingredient disclosure list (limit 0.1%)	
106232-83-1	Alcohols C13-C15 branched and linear, ethoxylated
112-34-5	2-(2-butoxyethoxy)ethanol
577-11-7	Sulfosuccinat-sodiumsalt
9004-82-4	Fettalkoholethersulfat
68425-47-8	Soyafattyacid-diethanolamide
69227-21-0	alcohols C12 – C18 ethoxylated, propoxylated
63449-41-2	quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides
69011-36-5	alcohols C13 branched, ethoxylated
61789-77-3	Quaternary ammonium compounds, dicocoalkyldimethyl, chlorides
7791-18-6	Magnesiumchlorid-hexahydrat
7786-30-3	Magnesium chloric hexahydrate
56-81-5	glycerol
67-63-0	propan-2-ol
111-42-2	2,2'-iminodiethanol
7732-18-5	water, distilled, conductivity or of similar purity
· Canadien Ingredient disclosure list (limit 1%)	
112-34-5	2-(2-butoxyethoxy)ethanol
577-11-7	Sulfosuccinat-sodiumsalt

· Product related hazard informations:

The product has been classified and marked in accordance with directives on hazardous materials.

· Hazard symbols:

Xi Irritant

· Risk phrases:

Irritating to skin.

Risk of serious damage to eyes.

· Safety phrases:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing, gloves and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

· National regulations:**· Technical instructions (air):**

Class	Share in %
NK	5,0-15

· 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.

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Non-ionic tensides can have varying characteristics and classifications despite same CAS-No.

- **Department issuing MSDS:**

Kurt Vogel

Tel. +49 (0)611 9271-175

- **Contact:** Kurt Vogel

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

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