Printing date 02/10/2012 Reviewed on 02/10/2012

1 Identification of the substance/mixture and of the company/undertaking

Product identifierTrade name: ClipK4

· Article number: 2197

· 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 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%
68425-47-8	Soyafattyacid-diethanolamide Xi R38-41	5.0-15%
9004-82-4	Fatty alcohol ether-sulfate 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.

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Trade name: ClipK4

(Contd. of page 1)

3 Hazards 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.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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).

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



Health = 2 Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 2 Fire = 0 Reactivity = 0

Other hazards

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

4 First aid measures

- · **General information:** Immediately remove any clothing soiled by the product.
- · After inhalation: Seek medical treatment in case of complaints.
- · 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.

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· After swallowing: If symptoms persist consult doctor.

(Contd. of page 2)

5 Firefighting measures

· Suitable extinguishing agents:

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

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture Product itself does not burn.
- · 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 clothing.
- · Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

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

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.
- 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.
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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



Material of gloves
PVC or PE gloves

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Recommended thickness of the material: ≥ 0.5 mm

(Contd. of page 3)

· 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

· General Information

· Appearance:

Form: Fluid Color: Light yellow · Odor: Pleasant

· pH-value at 20°C (68 °F): 8.7

· Change in condition

Melting point/Melting range: Undetermined. Boiling point/Boiling range: 100°C (212 °F)

· Flash point: Not applicable.

· Auto igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

· Vapor pressure: Undetermined.

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

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

Viscosity:

Dynamic at 20°C (68 °F): 175 mPas

Kinematic at 20°C (68 °F): 35 s (DIN 53211/4)

· Solvent content:

Organic solvents: 0.0 %

· Other information No further relevant information available.

10 Stability and reactivity

· Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Acute toxicity:

· LD/LC50 values that are relevant for classification:					
63449-4	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)			

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· Primary irritant effect:

(Contd. of page 4)

- · 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:

Irritant

12 Ecological information

- · Aquatic toxicity: No further relevant information available.
- · 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.
- · Ecotoxical effects:
- · Remark: Harmful to 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.

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

Harmful to aquatic organisms

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

14 Hallsport illiorillation			
· 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.			

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(Contd. of page 5)

15 Regulatory information

· Sara

Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

67-63-0 propan-2-ol

· TSCA (Toxic Substances Control Act):

69011-36-5 Alcohols, C13 branched, ethoxylated

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

577-11-7 Sulfosuccinat-sodiumsalt

68425-47-8 Soyafattyacid-diethanolamide

9004-82-4 Fatty alcohol ether-sulfate

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

7786-30-3 Magnesium chloric hexahydrate

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

67-63-0 propan-2-ol

7732-18-5 water, distilled, conductivity or of similar purity

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· 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.

· IARC (International Agency for Research on Cancer)

67-63-0 propan-2-ol

3

NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

67-63-0 propan-2-ol

A4

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· 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

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	(Contd. of page 6)			
112-34-5	2-(2-butoxyethoxy)ethanol			
577-11-7	Sulfosuccinat-sodiumsalt			
68425-47-8	8425-47-8 Soyafattyacid-diethanolamide			
9004-82-4	9004-82-4 Fatty alcohol ether-sulfate			
69227-21-0	69227-21-0 alcohols C12 – C18 ethoxylated, propoxylated			
	63449-41-2 quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides			
69011-36-5	69011-36-5 alcohols C13 branched, ethoxylated			
7786-30-3	Magnesium chloric hexahydrate			
61789-77-3	Quaternary ammonium compounds, dicocoalkyldimethyl, chlorides			
67-63-0	propan-2-ol			
· Canadien Inc	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			
68425-47-8	68425-47-8 Soyafattyacid-diethanolamide			
9004-82-4	Fatty alcohol ether-sulfate			
69227-21-0	alcohols C12 – C18 ethoxylated, propoxylated			
	quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides			
	alcohols C13 branched, ethoxylated			
	Magnesium chloric hexahydrate			
61789-77-3	Quaternary ammonium compounds, dicocoalkyldimethyl, chlorides			
67-63-0	propan-2-ol			
7732-18-5	water, distilled, conductivity or of similar purity			
Canadien Ing	Canadien Ingredient disclosure list (limit 1%)			
112-34-5 2-(2	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.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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	7.9

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Trade name: ClipK4

(Contd. of page 7)

* 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 MSDS:

Abteilung TQM Herr Vogel +49 (0) 611/9271-175

· Contact: Herr Vogel

* Data compared to the previous version altered.

USA -