according to Regulation (EC) No. 1907/2006 (REACH)

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# MEIKOLON ÖkoClean KS

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

#### Trade name/designation:

MEIKOLON ÖkoClean KS

#### **Additional information:**

Restricted to professional users.

# 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Use of the substance/mixture:

Washing and cleaning products

## 1.3. Details of the supplier of the safety data sheet

 $Supplier\ (manufacturer/importer/only\ representative/downstream\ user/distributor):$ 

#### MEIKO Maschinenbau GmbH&Co.KG

Englerstrasse 3 77652 Offenburg

Germany

**Telephone:** +49(0)781/203-0 **E-mail:** meikolon@meiko.de **Website:** www.meiko.de

## 1.4. Emergency telephone number

Vergiftungs-Informations-Zentrale Freiburg, 24h: +49(0)76119240

## **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008 [CLP]-:

Hazard classes and hazard categories	Hazard statements	Classification pro- cedure
Acute toxicity (oral) (Acute Tox. 4)	H302: Harmful if swallowed.	
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	

#### \* 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

## **Hazard pictograms:**



#### **GHS07**

Exclamation mark

## Signal word: Warning

hazard statements for health hazards	
H302	Harmful if swallowed.
H319	Causes serious eye irritation.

#### Supplemental Hazard information (EU): -

Precautionary state	ements Prevention
P280	Wear eye protection/face protection.

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Precautionary statements Response		
P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor// if you feel unwell.	
P337 + P313	If eye irritation persists: Get medical advice/attention.	

#### 2.3. Other hazards

No data available

## **SECTION 3: Composition / information on ingredients**

#### 3.2. Mixtures

#### Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concen- tration
<b>CAS No.:</b> 9038-95-3	1-[2-[2-(3-methoxypropoxy)propoxy]ethoxy]butane Acute Tox. 4	5 - 15 Wt %
	<b>∜ Warning</b> H302	
	fatty alcohol alkoxylate 4 Acute Tox. 4, Aquatic Chronic 3, Eye Irrit. 2  Warning H302-H319-H412	5 - 15 Wt %
CAS No.: 67-63-0 EC No.: 200-661-7 REACH No.: 01-2119457558-25	Propan-2-ol Eye Irrit. 2, Flam. Liq. 2, STOT SE 3  Danger H225-H319-H336	5 - 10 Wt %
CAS No.: 5949-29-1 EC No.: 201-069-1 REACH No.: 01-2119457026-42	citric acid monohydrate Eye Irrit. 2  • Warning H319	1 - 5 Wt %
CAS No.: 28348-53-0 EC No.: 290-913-5 REACH No.: 01-2119489411-37	sodium p-cumenesulphonate Eye Irrit. 2  Warning H319	1 - 5 Wt %

Full text of H- and EUH-phrases: see section 16.

#### **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

#### **General information:**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious place in recovery position and seek medical advice. Do not leave affected person unattended.

#### Following inhalation:

Provide fresh air. In case of respiratory tract irritation, consult a physician.

## In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. If skin irritation or rash occurs: Get medical advice/attention. Take off immediately all contaminated clothing.

#### After eve contact:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

## After ingestion:

Rinse mouth. Let water be drunken in little sips (dilution effect). Get medical advice/attention if you feel unwell.

#### Self-protection of the first aider:

Use personal protection equipment. No direct artificial respiration to be given by first aider.

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## 4.2. Most important symptoms and effects, both acute and delayed

Serious eye damage/eye irritation

## 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

#### Suitable extinguishing media:

Co-ordinate fire-fighting measures to the fire surroundings.

Water

Extinguishing powder

Carbon dioxide (CO2)

#### 5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

#### **Hazardous combustion products:**

Carbon monoxide

Carbon dioxide (CO2)

## 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

#### 5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water-.

## **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

## **Personal precautions:**

Remove persons to safety.

#### **Protective equipment:**

Wear protective gloves/protective clothing/eye protection/face protection.

#### 6.1.2. For emergency responders

#### **Personal protection equipment:**

Personal protection equipment: see section 8

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

## \* 6.3. Methods and material for containment and cleaning up

#### For containment:

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

## For cleaning up:

Water

#### 6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

#### 6.5. Additional information

Use appropriate container to avoid environmental contamination.

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## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

#### **Protective measures**

## Advices on safe handling:

Wear personal protection equipment (refer to section 8).

#### Fire prevent measures:

No special measures are necessary.

## Advices on general occupational hygiene

When using do not eat, drink or smoke. Avoid contact with eyes and skin.

## 7.2. Conditions for safe storage, including any incompatibilities

#### **Technical measures and storage conditions:**

Keep container tightly closed in a cool, well-ventilated place.

 $\textbf{Storage class:} \ 12 \ \hbox{-non-combustible liquids that cannot be assigned to any of the above storage classes}$ 

## 7.3. Specific end use(s)

No data available

## **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

## 8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	<ol> <li>long-term occupational exposure limit value</li> <li>short-term occupational exposure limit value</li> <li>Instantaneous value</li> <li>Monitoring and observation processes</li> <li>Remark</li> </ol>
WEL (GB)	Propan-2-ol CAS No.: 67-63-0	① 400 ppm (999 mg/m³) ② 500 ppm (1,250 mg/m³)
WEL (GB)	Propanediol CAS No.: 57-55-6	① 10 mg/m³ ⑤ (particulates)
WEL (GB)	Propanediol CAS No.: 57-55-6	① 150 ppm (474 mg/m³) ⑤ (total vapour & particulates)

## 8.1.2. Biological limit values

No data available

#### 8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type
		② Exposure route
sodium p-cumenesulphonate	53.6 mg/m <sup>3</sup>	① DNEL worker
CAS No.: 28348-53-0		② inhalative, long-term, systemic
sodium p-cumenesulphonate	7.6 mg/kg	① DNEL worker
CAS No.: 28348-53-0	bw/day	② dermal, long-term, systemic
sodium p-cumenesulphonate	0.096 mg/	① DNEL worker
CAS No.: 28348-53-0	cm <sup>2</sup>	② dermal, long-term, local
Propanediol	168 mg/m <sup>3</sup>	① DNEL worker
CAS No.: 57-55-6		② inhalative, long-term, systemic
Propanediol	10 mg/m <sup>3</sup>	① DNEL worker
CAS No.: 57-55-6		② inhalative, long-term, local

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Substance name	DNEL value	① DNEL type
		② Exposure route
Propanediol	10 mg/m <sup>3</sup>	① DNEL worker
CAS No.: 57-55-6		② inhalative, short-term, local, (acute)
Propanediol	213 mg/kg	① DNEL worker
CAS No.: 57-55-6	bw/day	② dermal, long-term, systemic
Propanediol	85 mg/kg	① DNEL worker
CAS No.: 57-55-6	bw/day	② oral, long-term, systemic

Substance name	PNEC Value	① PNEC type
citric acid monohydrate CAS No.: 5949-29-1	0.44 mg/l	① PNEC aquatic, freshwater
citric acid monohydrate CAS No.: 5949-29-1	0.044 mg/l	① PNEC aquatic, marine water
citric acid monohydrate CAS No.: 5949-29-1	3.46 mg/kg	① PNEC sediment, freshwater
citric acid monohydrate CAS No.: 5949-29-1	34.6 mg/kg	① PNEC sediment, marine water
sodium p-cumenesulphonate CAS No.: 28348-53-0	0.23 mg/l	① PNEC aquatic, freshwater
sodium p-cumenesulphonate CAS No.: 28348-53-0	0.023 mg/l	① PNEC aquatic, marine water
sodium p-cumenesulphonate CAS No.: 28348-53-0	100 mg/l	① PNEC sewage treatment plant
sodium p-cumenesulphonate CAS No.: 28348-53-0	0.862 mg/kg	① PNEC sediment, freshwater
sodium p-cumenesulphonate CAS No.: 28348-53-0	0.0862 mg/ kg	① PNEC soil, marine water
Propanediol CAS No.: 57-55-6	260 mg/l	① PNEC aquatic, freshwater
Propanediol CAS No.: 57-55-6	26 mg/l	① PNEC aquatic, marine water
Propanediol CAS No.: 57-55-6	20,000 mg/l	① PNEC sewage treatment plant
Propanediol CAS No.: 57-55-6	572 mg/kg	① PNEC sediment, freshwater
Propanediol CAS No.: 57-55-6	57.2 mg/kg	① PNEC sediment, marine water

## 8.2. Exposure controls

## 8.2.1. Appropriate engineering controls

No data available

## 8.2.2. Personal protection equipment



## **Eye/face protection:**

Eye glasses with side protection DIN EN 166

## 8.2.3. Environmental exposure controls

No data available

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## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

### **Appearance**

Physical state: Liquid Colour: blue

Odour: Alcohol

#### Safety relevant basis data

parameter		at °C	Method	Remark
pH	2.1	20 °C		
Melting point	not determined			
Freezing point	not determined			
Initial boiling point and boiling range	> 90 °C			
Decomposition temperature	not determined			
Flash point	= 38 °C			Not sustaining combustion
Evaporation rate	not determined			
Auto-ignition temperature	not determined			
Upper/lower flammability or explosive limits	not determined			
Vapour pressure	not determined			
Vapour density	not determined			
Density	≈ 1 g/cm <sup>3</sup>	20 °C		
Bulk density	not determined			
Water solubility	completely miscible	20 °C		
Partition coefficient: n-octanol/ water	not determined			
Dynamic viscosity	not determined			
Kinematic viscosity	not determined	40 °C		

#### 9.2. Other information

No data available

## **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

The product itself does not burn.

## 10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

## 10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

#### \* 10.4. Conditions to avoid

Stable under recommended storage and handling conditions.

## \* 10.5. Incompatible materials

Alkali (lye)

#### \* 10.6. Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours.

according to Regulation (EC) No. 1907/2006 (REACH)

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## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

CAS No.	Substance name	Toxicological information
9038-95-3	1-[2-[2-(3-methoxypropoxy)propoxy]ethoxy]butane	<b>LD<sub>50</sub> oral:</b> >200 - <2,000 mg/kg
	fatty alcohol alkoxylate 4	<b>LD<sub>50</sub> oral:</b> >300 - <2,000 mg/kg (Rat)
5949-29-1	citric acid monohydrate	LD <sub>50</sub> oral: =5,400 mg/kg (Mouse) LD <sub>50</sub> dermal: >2,000 mg/kg (Rat)
28348-53-0	sodium p-cumenesulphonate	LD <sub>50</sub> oral:  >7,000 mg/kg (Rat)  LD <sub>50</sub> dermal:  >2,000 mg/kg (Rabbit)  LC <sub>50</sub> Acute inhalation toxicity (vapour):  =6.41 mg/l (Rat)

#### Acute oral toxicity:

Harmful if swallowed.

## Acute dermal toxicity:

Based on available data, the classification criteria are not met.

#### Acute inhalation toxicity:

Based on available data, the classification criteria are not met.

## Skin corrosion/irritation:

Based on available data, the classification criteria are not met.

#### **Serious eve damage/irritation:**

Causes serious eye irritation.

#### 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:**

Based on available data, the classification criteria are not met.

## **Aspiration hazard:**

Based on available data, the classification criteria are not met.

#### Additional information:

No data available

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## **SECTION 12: Ecological information**

## 12.1. Toxicity

CAS No.	Substance name	Toxicological information
9038-95-3	1-[2-[2-(3-methoxypropoxy)propoxy]ethoxy]butane	LC <sub>50</sub> : >100 mg/l 4 d (fish-, Brachydanio rerio (zebra-fish-))  EC <sub>50</sub> : >100 mg/l 2 d (crustaceans, Daphnia magna (Big water flea))  EC <sub>50</sub> : >100 mg/l 3 d (Algae/water plant, Scene desmus subspicatus)
	fatty alcohol alkoxylate 4	<b>LC</b> <sub>50</sub> : >1 - <10 mg/l 2 d (fish-, Leuciscus idus (golden orfe)) <b>NOEC:</b> >0.1 - <1 mg/l 21 d
67-63-0	Propan-2-ol	EC <sub>50</sub> : >1,000 mg/l 3 d (Algae/water plant, Scen edesmus subspicatus)
5949-29-1	citric acid monohydrate	<b>LC</b> <sub>50</sub> : =440 mg/l 2 d (fish-, Leuciscus idus (golden orfe))
28348-53-0	sodium p-cumenesulphonate	LC <sub>50</sub> : >1,000 mg/l 4 d (fish-, Oncorhynchus mykiss (Rainbow trout)) EC <sub>50</sub> : >1,000 mg/l 2 d (crustaceans, Daphnia magna (Big water flea)) ErC <sub>50</sub> : >230 mg/l 4 d (Algae/water plant)

## 12.2. Persistence and degradability

CAS No.	Substance name	Biodegradation	Remark
9038-95-3	1-[2-[2-(3-methoxypropoxy)propoxy]ethoxy]butan	Yes, rapidly	
	e		
	fatty alcohol alkoxylate 4	Yes, rapidly	
67-63-0	Propan-2-ol	Yes, rapidly	
5949-29-1	citric acid monohydrate	Yes, rapidly	
28348-53-0	sodium p-cumenesulphonate	Yes, rapidly	

## 12.3. Bioaccumulative potential

CAS No.	Substance name	Log K <sub>OW</sub>	Bioconcentration factor (BCF)
67-63-0	Propan-2-ol	-0.16	

## 12.4. Mobility in soil

No data available

## 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## 12.6. Other adverse effects

No data available

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

## 13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

## Waste code product:

20 01 29 *	Detergents containing hazardous substan	aces

<sup>\*:</sup> Evidence for disposal must be provided.

en / GB

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#### Waste code packaging:

15 01 10 \* packaging containing residues of or contaminated by dangerous substances

## **Waste treatment options**

## **Appropriate disposal / Product:**

Consult the appropriate local waste disposal expert about waste disposal.

## Appropriate disposal / Package:

Completely emptied packages can be recycled.

## **SECTION 14: Transport information**

No dangerous good in sense of these transport regulations.

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA- DGR)
14.1. UN-No.			
No dangerous good	No dangerous good	No dangerous good	No dangerous good
in sense of these			
transport regulations.	transport regulations.	transport regulations.	transport regulations.
14.2. UN proper shi	pping name		
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.3. Transport haz	ard class(es)		
not relevant			
14.4. Packing group	)		
not relevant			
14.5. Environmenta	l hazards		
not relevant			
14.6. Special preca	utions for user		
not relevant	_		

# 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant

## **SECTION 15: Regulatory information**

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

## 15.1.1. EU legislation

#### Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: This product is not assigned to a hazard category.

Regulation (EC) No. 648/2004 (Detergents regulation)

15-30% non-ionic surfactants

## 15.1.2. National regulations

No data available

#### 15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

<sup>\*:</sup> Evidence for disposal must be provided.

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## **SECTION 16: Other information**

## 16.1. Indication of changes

1.1.	Product identifier
2.1.	Classification of the substance or mixture
2.2.	Label elements
3.2.	Mixtures
6.3.	Methods and material for containment and cleaning up
9.1.	Information on basic physical and chemical properties
10.4.	Conditions to avoid
10.5.	Incompatible materials
10.6.	Hazardous decomposition products
11.1.	Information on toxicological effects
13.1.	Waste treatment methods
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture

## 16.2. Abbreviations and acronyms

No data available

## 16.3. Key literature references and sources for data

No data available

# 16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Classification according to Regulation (EC) No 1272/2008 [CLP]-:

Hazard classes and hazard categories	Hazard statements	Classification pro- cedure
Acute toxicity (oral) (Acute Tox. 4)	H302: Harmful if swallowed.	
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	

## 16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

## 16.6. Training advice

No data available

#### 16.7. Additional information

No data available

<sup>\*</sup> Data changed compared with the previous version