REIN ABER RICHTIG
E.MAYR REINIGUNGSTECHNIK

Exakt Chloritol

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

1.1. Product identifier

Trade name/designation:

Exakt Chloritol - Item No.:1717/5L

UFI:
FRE2-0D8V-AW7J-4DH7

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

Use of the substance/mixture:
Cleaning agent
Nur für den industriellen und gewerblichen Gebrauch.

1.3. Details of the supplier of the safety data sheet

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

E.MAYR Reinigungstechnik GesmbH
Ortsstraße 285
A-2331 Vösendorf
Austria
Telephone: +43 (0) 1 699 17 64 -0
Telefax: +43 (0) 1 699 17 64 - 33
E-mail:office@e-mayr.at
Website: www.reinaberrichtig.at

1.4. Emergency telephone number

Poison Control Center for Austria (VIZ) Pho: 01/406 43 43-0

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 procedure
Skin corrosion/irritation *(Skin Corr. 1)*	H314: Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation *(Eye Dam. 1)*	H318: Causes serious eye damage.	
Hazardous to the aquatic environment *(Aquatic Acute 1)*	H400: Very toxic to aquatic life.	
Hazardous to the aquatic environment *(Aquatic Chronic 2)*	H411: Toxic to aquatic life with long lasting effects.	

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2.2. Label elements

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

Hazard pictograms:

GHS05
Corrosion

GHS09
Environment

Signal word: Danger

Hazard statements for health hazards	
H314	Causes severe skin burns and eye damage.

Hazard statements for environmental hazards	
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Supplemental hazard information	
EUH031	Contact with acids liberates toxic gas.

Precautionary statements Prevention	
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing and eye protection/face protection.

Precautionary statements Response	
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER.

Additional information:
Contains: Natriumhypochloritlösung ca. 4 % - 5 %

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]**	**Concentration**
CAS No.: 7681-52-9 EC No.: 231-668-3 Index No.: 017-011-00-1 REACH No.: 01-2119488154-34	**Natriumhypochloritlösung** Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Eye Dam. 1 (H318), Skin Corr. 1B (H314) Danger EUH031 M-factor (acute): 10 M-factor (chronic): 1 **Specific concentration limit (SCL)** C ≥ 5% **Acute Toxicity Estimate** ATE (dermal) > 20,000 mg/kg	4 – < 5 weight-%
CAS No.: 61788-90-7 EC No.: 263-016-9 REACH No.: 01-2119490061-47	**(Fraktionerter Kokos) dimethylaminoxid** Acute Tox. 4 (H302), Aquatic Acute 1 (H400), Aquatic Chronic 2 (H411), Eye Dam. 1 (H318), Skin Irrit. 2 (H315) Danger M-factor (acute): 1 **Acute Toxicity Estimate** ATE (oral) 500 mg/kg	1 – < 5 weight-%

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Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 68891-38-3 EC No.: 500-234-8 REACH No.: 01-2119488639-16	**Fettalkohol-C12/14-ethersulfat, Natriumsalz** Aquatic Chronic 3 (H412), Eye Dam. 1 (H318), Skin Irrit. 2 (H315) Danger **Specific concentration limit (SCL)** Eye Irrit. 2; H319: 5% ≤ C < 10% Eye Dam. 1; H318: 10% ≤ C < 100% **Acute Toxicity Estimate** ATE (oral) 4,100 mg/kg ATE (dermal) > 2,000 mg/kg	0 – < 5 weight-%
CAS No.: 1310-58-3 EC No.: 215-181-3 REACH No.: 01-2119487136-33	**potassium hydroxide** Acute Tox. 4 (H302), Eye Dam. 1 (H318), Met. Corr. 1 (H290), Skin Corr. 1A (H314), Skin Corr. 1B (H314) Danger **Specific concentration limit (SCL)** Skin Corr. 1A; H314: C ≥ 5% Skin Corr. 1B; H314: 2% ≤ C < 5% Skin Irrit. 2; H315: 0.5% ≤ C < 2% Eye Dam. 1; H318: C ≥ 2% Eye Irrit. 2; H319: 0.5% ≤ C < 2% **Acute Toxicity Estimate** ATE (oral) 333 mg/kg	0 – ≤ 1 weight-%

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 but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended. Warning First aider: Pay attention to self-protection!

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

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

After eye contact:
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Following ingestion:
Rinse mouth. Get medical advice/attention if you feel unwell. Get immediate medical advice/attention. Let 1 glass of water be drunken in little sips (dilution effect). Rinse mouth immediately and drink 1 glass of of water. Do NOT induce vomiting.

Self-protection of the first aider:
Use personal protection equipment.

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

Skin corrosion/irritation Serious eye damage/eye irritation, Atemnot, Schmerzen, Kollaps, Erblindungsgefahr

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:
Auf Umgebung abstimmen

Unsuitable extinguishing media:
keine

5.2. Special hazards arising from the substance or mixture
Nicht brennbar.

Hazardous combustion products:
In case of fire: Gases/vapours, toxic

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.Special danger of slipping by leaking/spilling product.

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 (sand, diatomaceous earth, acid- or universal binding agents).

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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:
Avoid contact with skin, eyes and clothes.Open windows to ensure natural ventilation. Wear personal protection equipment (refer to section 8).

Fire prevent measures:
No special fire protection measures are necessary.

Advices on general occupational hygiene
When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:
Keep container tightly closed in a cool, well-ventilated place.

Storage class (TRGS 510, Germany): 8B – Non-combustible corrosive substances

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	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
MAK (AT)	**potassium hydroxide** CAS No.: 1310-58-3 EC No.: 215-181-3	① 2 mg/m³ ⑤ (einatembare Fraktion)
MAK (AT)	**sodium hydroxide** CAS No.: 1310-73-2 EC No.: 215-185-5	② 4 mg/m³ ⑤ (einatembare Fraktion max. 8x5 min./Schicht, Momentanwert)
MAK (AT)	**sodium hydroxide** CAS No.: 1310-73-2 EC No.: 215-185-5	① 2 mg/m³ ⑤ (einatembare Fraktion)

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
potassium hydroxide CAS No.: 1310-58-3 EC No.: 215-181-3	1 mg/m³	① DNEL worker ② Long-term – inhalation, local effects
sodium hydroxide CAS No.: 1310-73-2 EC No.: 215-185-5	1 mg/m³	① DNEL worker ② Long-term – inhalation, local effects
sodium hydroxide CAS No.: 1310-73-2 EC No.: 215-185-5	1 mg/m³	① DNEL Consumer ② Long-term – inhalation, local effects

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 EN 166

Skin protection:

Tested protective gloves must be worn EN ISO 374 Suitable material: Breakthrough time: min In the case of wanting to use the gloves again, clean them before taking off and air them well. Breakthrough times and swelling properties of the material must be taken into consideration.

Respiratory protection:

Suitable respiratory protection apparatus: ABEK-P3

Other protection measures:

Protective clothing.

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: light yellow
Odour: not determined
flammability: No data available

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	≈ 12.7		
Melting point	*No data available*		
Freezing point	*No data available*		
Initial boiling point and boiling range	*No data available*		
Flash point	*No data available*		
Evaporation rate	*No data available*		
Auto-ignition temperature	*No data available*		
Upper/lower flammability or explosive limits	*No data available*		
Vapour pressure	*No data available*		
Vapour density	*No data available*		
Density	≈ 1.07 g/cm³	23 °C	
Bulk density	*not applicable*		
Water solubility	miscible		
Dynamic viscosity	*No data available*		
Kinematic viscosity	*No data available*		

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Violent reaction with:Acid, concentrated White/yellow phosphor Light metal
Contact with acids liberates toxic gas.

10.4. Conditions to avoid

Avoid high temperatures or direct sunlight.

10.5. Incompatible materials

Acid, Glass, Aluminium , Light metal,Oxidising agent, strong

10.6. Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Natriumhypochloritlösung CAS No.: 7681-52-9 EC No.: 231-668-3
LD_{50} dermal: >20,000 mg/kg

Fettalkohol-C12/14-ethersulfat, Natriumsalz CAS No.: 68891-38-3 EC No.: 500-234-8	
LD_{50} oral: 4,100 mg/kg (Ratte)	
LD_{50} dermal: >2,000 mg/kg (Ratte)	
potassium hydroxide CAS No.: 1310-58-3 EC No.: 215-181-3	
LD_{50} oral: 333 mg/kg (Ratte)	

Acute oral toxicity:
Based on available data, the classification criteria are not met.

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:
Causes severe skin burns and eye damage.

Serious eye damage/irritation:
Causes serious eye damage.

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

11.2. Information on other hazards
No data available

SECTION 12: Ecological information

12.1. Toxicity

Natriumhypochloritlösung CAS No.: 7681-52-9 EC No.: 231-668-3	
EC_{50}: 0.141 mg/L 2 d (Daphnia)	
ErC_{50}: 0.036 mg/L 3 d (Algae/water plant)	
LC_{50}: 0.05 mg/L (fish)	
NOEC: 0.005 mg/L 3 d (Algae/water plant)	
LOEC: 0.005 mg/L 3 d (Algae/water plant)	
(Fraktionerter Kokos) dimethylaminoxid CAS No.: 61788-90-7 EC No.: 263-016-9	
LC_{50}: >1 – 10 mg/L 4 d (fish, Pimephales promelas (fettköpfige Elritze))	
EC_{50}: >0.1 – 1 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata (Grünalge)) OECD- Prüfrichtlinie 201	
NOEC: >0.01 – 0.1 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata (Grünalge)) OECD- Prüfrichtlinie 201	

Fettalkohol-C12/14-ethersulfat, Natriumsalz CAS No.: 68891-38-3 EC No.: 500-234-8
LC_{50}: 7.1 mg/L 4 d (fish)
LC_{50}: 7.1 mg/L 4 d (fish, Danio rerio (previous name: Brachydanio rerio))
LC_{50}: 1.17 mg/L 4 d (crustaceans, Daphnia magna) OECD Guideline 211 (Daphnia magna Reproduction Test)
EC_{50}: 7.2 mg/L 2 d (Daphnia magna)
EC_{50}: 27.7 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus (previous name: Scenedesmus subspicatus))
EC_{50}: 7.4 mg/L 2 d (crustaceans, Daphnia magna)
NOEC: 0.27 mg/L 21 d (Daphnia magna)
NOEC: 0.95 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus (previous name: Scenedesmus subspicatus))
NOEC: 0.14 mg/L 28 d (fish, Oncorhynchus mykiss (previous name: Salmo gairdneri))
NOEC: 0.27 mg/L 21 d (crustaceans, Daphnia magna) OECD Guideline 211 (Daphnia magna Reproduction Test)

Aquatic toxicity:
Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

(Fraktionerter Kokos) dimethylaminoxid CAS No.: 61788-90-7 EC No.: 263-016-9
Biodegradation: Yes, rapidly

12.3. Bioaccumulative potential

Natriumhypochloritlösung CAS No.: 7681-52-9 EC No.: 231-668-3
Log K_{OW}: 20
Fettalkohol-C12/14-ethersulfat, Natriumsalz CAS No.: 68891-38-3 EC No.: 500-234-8
Log K_{OW}: 0.3
potassium hydroxide CAS No.: 1310-58-3 EC No.: 215-181-3
Log K_{OW}: ≤ 0.83

12.4. Mobility in soil
No data available

12.5. Results of PBT and vPvB assessment

Natriumhypochloritlösung CAS No.: 7681-52-9 EC No.: 231-668-3
Results of PBT and vPvB assessment: —
(Fraktionerter Kokos) dimethylaminoxid CAS No.: 61788-90-7 EC No.: 263-016-9
Results of PBT and vPvB assessment: —
Fettalkohol-C12/14-ethersulfat, Natriumsalz CAS No.: 68891-38-3 EC No.: 500-234-8
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
potassium hydroxide CAS No.: 1310-58-3 EC No.: 215-181-3
Results of PBT and vPvB assessment: —

12.6. Endocrine disrupting properties
No data available

12.7. 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

07 06 01 *	(07) WASTES FROM ORGANIC CHEMICAL PROCESSES (06) Wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics (01 *) aqueous washing liquids and mother liquors
20 01 29 *	(20) MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS (01) separately collected fractions (except 15 01) (29 *) Detergents containing hazardous substances

**: Evidence for disposal must be provided.*

Waste treatment options

Appropriate disposal / Product:

Consult the appropriate local waste disposal expert about waste disposal.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
UN 1719	UN 1719	UN 1719	UN 1719
14.2. UN proper shipping name			
CAUSTIC ALKALI LIQUID, N.O.S. (Kaliumhydroxid, Natriumhypochlorit)	CAUSTIC ALKALI LIQUID, N.O.S. (Kaliumhydroxid, Natriumhypochlorit)	CAUSTIC ALKALI LIQUID, N.O.S. (Kaliumhydroxid, Natriumhypochlorit)	CAUSTIC ALKALI LIQUID, N.O.S. (Kaliumhydroxid, Natriumhypochlorit)
14.3. Transport hazard class(es)			
 8	 8	 8	 8
14.4. Packing group			
II	II	II	II
14.5. Environmental hazards			
		 MARINE POLLUTANT	No
14.6. Special precautions for user			
Special Provisions: 274 **Limited quantity (LQ):** 1 L **Excepted Quantities (EQ):** E2 **Hazard identification number (Kemler No.):** 80 **Classification code:** C5 **Tunnel restriction code:** (E)	**Special Provisions:** 274 **Limited quantity (LQ):** 1 L **Excepted Quantities (EQ):** E2 **Classification code:** C5	**Special Provisions:** 274 **Limited quantity (LQ):** 1 L **Excepted Quantities (EQ):** E2 **EmS-No.:** F-A, S-B	**Special Provisions:** A3 **Limited quantity (LQ):** Y840 **Excepted Quantities (EQ):** E2

14.7. Maritime transport in bulk according to IMO instruments

No data available

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SECTION 15: Regulatory information

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

15.1.1. EU legislation

Authorisations:

EU legislation
Labelling for contents according to regulation (EC) No. 648/2004
anionic surfactants: less than 5%
amphoteric surfactants: less than 5%
chlorine-based bleaching agents: less than 5%

National regulations
Hazardous Substances Ordinance (GefStoffV)
Minimum protective measures according to TRGS 500
Berufsgenossenschaftliche Vorschriften (DGUV-Vorschriften)
Berufsgenossenschaftliche Regeln (DGUV-Regeln)

15.1.2. National regulations

No data available

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out for this product.

SECTION 16: Other information

16.1. Indication of changes

No data available

16.2. Abbreviations and acronyms

No data available

16.3. Key literature references and sources for data

Substance name	Type	source of supply
Fettalkohol-C12/14-ethersulfat, Natriumsalz CAS No.: 68891-38-3 EC No.: 500-234-8	LC_{50}; EC_{50}; NOEC	Source: European Chemicals Agency, http://echa.europa.eu/

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
Skin corrosion/irritation *(Skin Corr. 1)*	H314: Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation *(Eye Dam. 1)*	H318: Causes serious eye damage.	
Hazardous to the aquatic environment *(Aquatic Acute 1)*	H400: Very toxic to aquatic life.	
Hazardous to the aquatic environment *(Aquatic Chronic 2)*	H411: Toxic to aquatic life with long lasting effects.	

16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

Hazard statements	
H290	May be corrosive to metals.
H302	Harmful if swallowed.

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Hazard statements	
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Supplemental hazard information	
EUH031	Contact with acids liberates toxic gas.

16.6. Training advice

No data available

16.7. Additional information

The information is based on our current level of knowledge and is used to describe the product with regard to the safety precautions to be taken. They do not represent a guarantee of the properties of the product described.
It is the responsibility of the recipient of our product to observe existing laws and regulations.