

Safety data sheet according to 1907/2006/EC, Article 31

BuuMosol® Reiniger TI M2000 - Universal Cleaner

according to current guidelines: 01.01.2021

total pages: 1-10

Section 1 - Identification of the substance or mixture and of the company

1.1. Product identifier - Trade name

- **BuuMosol® Reiniger TI M2000** Cleans trucks, tarpaulins and tents, workshop and hall floors, engines, assemblies, gears and machines, chassis and sub-floors, construction and agricultural machinery as well as all types of dirty surfaces. Fast and extremely powerful, highly alkaline professional concentrate for commercial vehicles, workshops and machines.
- Extremely good cleaning performance for oil, grease, soot and other soiling.
- The product is biodegradable. Double concentrate, extremely economical.

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

- No further relevant information available.
- **Application of the substance/ the mixture** - Alkaline cleaner/ detergent

Manufacturer/ Supplier:

- BuuM Herstellung u. Vertrieb
umwelttechnischer Produkte GmbH & Co. KG
Hamburger Str.27 D
D-22952 Lütjensee

Further information obtainable/ Emergency telephone number:

- Head Office / Sale
Phone 0049-4154-7351
Fax 0049-4154-75178

Section 2 - Hazards identification

2.1. Classification of the substance or mixture

- **Classification according to Regulation (EC) No 1272/2008**
Skin Corr. 1A H314 - Causes severe skin burns and eye damage.
Eye Dam. 1 H318 - Causes serious eye damage.

2.2. Label elements

- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
(Classification, Labelling and Packaging of Substances and Mixtures)

- **Hazard pictograms**



GHS05

- **Signal word** - Danger

- **Hazard-determining components of labelling**

potassium hydroxide

tetrasodium ethylenediaminetetraacetate

Quaternary ammonium compounds, C12-14-(even numbered)alkyl(hydroxyethyl)dimethyl, chlorides
1-hydroxyethane-1,1-diylbis(phosphonic acid)

- **Hazard statements**

H314 - Causes severe skin burns and eye damage.

- **Precautionary statements**

P260 - Do not breathe mist/vapours/spray

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 - IF SWALLOWED: rinse mouth. DO NOT induce vomiting.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water [or shower]

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/doctor.

2.3. Other hazards

- **Results of PBT- and vPvB- assessment - Not applicable.**

PBT (persistent, bioakkumulativ und toxisch)

vPvB (very/sehr persistent und very / sehr bioakkumulativ)

Section 3 - Composition/ information on ingredients

3.2. Chemical characterisation - Mixtures

- Description: Mixture of substances listed below with nonhazardous additions.

- Dangerous components

CAS: 1310-58-3	potassium hydroxide	2,5-10%
EINECS: 215-181-3	Skin Corr. 1A, H314; Acute Tox. 4, H302 Reg.nr.: 01-2119487136-33	
CAS: 64-02-8	tetrasodium ethylenediaminetetraacetate	2,5-10%
EINECS: 200-573-9	STOT RE 2, H373; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H332 - Reg.nr.: 01-2119486762-27	
CAS: 2809-21-4	1-hydroxyethane-1,1-diylbis(phosphonic acid)	≤ 2,5%
EINECS: 220-552-8	Met. Corr.1, H290; Eye Dam. 1, H318; Acute Tox. 4, H302 Reg.nr.: 01-2119510391-53	
EG-Nr: 931-275-3	C12-14-(even numbered)alkyl(hydroxyethyl)dimethyl, chlorides	≤ 2,5%
Reg.nr.: 01-2119484688-17	STOT RE 2, H373; Skin Corr. 1C, H314; Aquatic Acute 1, H400; Aquatic Chronic 2, H411; Acute Tox. 4, H302	
CAS: 61791-14-8	Amines, coco alkyl, ethoxylated	≤ 2,5%
NLP: 500-152-2	Eye Dam. 1, H318; Acute Tox. 4, H302; Aquatic Chronic 3, H412	

EG-Nr: 931-292-6 Amines, C12-14 (even numbered)-alkyldimethyl, Noxides $\leq 2,5\%$
Reg.nr.: Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 2,
01-2119490061-47 H411; Acute Tox. 4, H302; Skin Irrit. 2, H315

- Regulation (EC) No 648/2004 on detergents / Labelling for contents
EDTA and salts thereof, phosphonates, cationic surfactants, non-ionic surfactants $< 5\%$
perfumes

Additional information: For the wording of the listed hazard phrases refer to section 16.

Section 4 - First aid measures

4.1. Description of first aid measures

- **General information:** Immediately remove any clothing soiled by the product.
Take affected persons out of danger area and lay down.
In case of unconsciousness place patient stably in side position for transportation.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately rinse with 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:** Do not induce vomiting; call for medical help immediately.
Drink plenty of water and provide fresh air. Call for a doctor immediately. Rinse mouth.

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

- No further relevant information available.

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

- No further relevant information available.

Section 5 - Firefighting measures

5.1. Extinguishing media

- Use fire extinguishing methods suitable to surrounding conditions.
CO₂, powder or water spray.
Fight larger fires with water spray or alcohol resistant foam.

5.2. Special hazards arising from the substance or mixture

- No further relevant information available.

5.3. Advice for firefighters

- Protective equipment:
Mouth respiratory protective device.
Wear fully protective suit.
- Additional information:
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Section 6 - Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation. Avoid contact with skin and eyes.
Use respiratory protective device against the effects of fumes/dust/aerosol.

6.2. Environmental precautions

- Dilute with plenty of water.
In case of seepage into the ground inform responsible authorities.
Inform respective authorities when entering in waters or the sewerage.
Do not allow to enter sewers/ surface or ground water.

6.3. Methods and material for containment and cleaning up

- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

6.4. 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.

Section 7 - Handling and storage

7.1. Precautions for safe handling

- Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
Open and handle receptacle with care
- **Information about fire - and explosion protection**
Keep ignition sources away - Do not smoke

7.2. Conditions for safe storage, including any incompatibilities

- Requirements to be met by storerooms and receptacles: Store only in the original receptacle
Provide alkali-resistant floor
- Information about storage in one common storage facility: Do not store together with acids.
Store away from oxidising agents. Store away from metals.
Store away from food, beverages and feed
- **Further information about storage conditions:**
Keep container tightly sealed. Protect from heat and direct sunlight.
Protect from frost.
Storage class: 8 B (Non-flammable, corrosive hazardous substances)
Classification according to the Ordinance on Industrial Safety and Health (BetrSichV): -

7.3. Specific end use(s) - No further relevant information available

Section 8 - Limitation and monitoring of exposure/ Personal protection

Additional information about design of technical facilities: No further data, see item 7.

8.1. Control parameters

- Ingredients 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.

- **DNELs**

1310-58-3 potassium hydroxide

Inhalative	Long-term - local effects, worker	1 mg/m ³ (worker)
	Long term - local effects, general population	1 mg/m ³ (general population)

64-02-8 tetrasodium ethylenediaminetetraacetate

Oral	Long term - systemic effects, general population	25 mg/kg bw/day (general population)
Inhalative	Acute - local effects, worker	3 mg/m ³ (worker)
	Long-term - local effects, worker	1,5 mg/m ³ (worker)
	Acute - local effects, general population	1,2 mg/m ³ (general population)
	Long term - local effects, general population	0,6 mg/m ³ (general population)

2809-21-4 1-hydroxyethane-1,1-diylbis(phosphonic acid)

Oral	Long-term - systemic effects, worker	13 mg/kg bw/day (worker)
	Long term - systemic effects, general population	6,5 mg/kg bw/day (general population)

C12- 14-(even numbered)alkyl(hydroxyethyl)dimethyl, chlorides

Oral	Long term - systemic effects, general population	0,9 mg/kg bw/day (general population)
Dermal	Long-term - systemic effects, worker	1,25 mg/kg bw/day (worker)
	Long term - systemic effects, general population	0,9 mg/kg bw/day (general population)
	Long term - local effects, general population	0,02 mg/cm ² (general population)
Inhalative	Long-term - systemic effects, worker	2,2 mg/m ³ (worker)
	Long term - systemic effects, general population	3,1 mg/m ³ (general population)

• **PNECs****64-02-8 tetrasodium ethylenediaminetetraacetate**

Aquatic compartment - freshwater	2,2 mg/l (freshwater)
Aquatic compartment - marine water	0,22 mg/l (marine water)
Aquatic compartment - water, intermittent releases	1,2 mg/l (intermittent release water)
Terrestrial compartment - soil	0,72 mg/kg dw (soil)
sewage treatment plant	43 mg/l (sewage treatment plant)

2809-21-4 1-hydroxyethane-1,1-diylbis(phosphonic acid)

Aquatic compartment - freshwater	0,136 mg/l (freshwater)
Aquatic compartment - marine water	0,0136 mg/l (marine water)
Aquatic compartment - sediment in freshwater	59 mg/kg sed dw (sediment fresh water)
Aquatic compartment - sediment in marine water	5,9 mg/kg sed dw (sediment marine water)
Terrestrial compartment - soil	96 mg/kg dw (soil)
sewage treatment plant	20 mg/l (sewage treatment plant)
Oral secondary poisoning	12 mg/kg food (food sec poisoning)

Quaternary ammonium compounds, C12-14-(even numbered)alkyl(hydroxyethyl)dimethyl,chlorides

Aquatic compartment - freshwater	0,004 mg/l (freshwater)
Aquatic compartment - marine water	0,0004 mg/l (marine water)
Aquatic compartment - water, intermittent releases	0,0014 mg/l (intermittent release water)
Aquatic compartment - sediment in freshwater	4,5 mg/kg sed dw (sediment fresh water)
Aquatic compartment - sediment in marine water	0,48 mg/kg sed dw (sediment marine water)
Terrestrial compartment - soil	0,61 mg/kg dw (soil)
sewage treatment plant	0,19 mg/l (sewage treatment plant)
Oral secondary poisoning	16,7 mg/kg food (food sec poisoning)

Additional information: The lists valid during the making were used as basis.

8.2. Exposure controls Personal - protective equipment

- **General protective and hygienic measures:** 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. Do not eat, drink, smoke or sniff while working. Do not inhale gases / fumes / aerosols.
- **Respiratory protection:** In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. Filter A/P2 and Filter B
- **Protection of hands:** Protective gloves - Alkaline resistant gloves
Nitrile rubber/ Butyl rubber
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Safety glasses. Tightly sealed goggles
- **Body protection:** Alkaline resistant protective clothing

Section 9 - Physical and chemical properties

9.1. Information on basic physical and chemical properties

- **General Information/ Appearance**
Form: Fluid
Colour: Orange
Oder: Fruit-like
Odour threshold: Not determined
pH- value at 20 °C: 13,0 (DIN 19268)
- **Change in condition**
Melting point/freezing point: Undetermined.
Initial boiling point and boiling range: Undetermined.
Flash point: Not determined.
Flammability (solid, gas): Not applicable
- **Flash point:** Not determined.
Flammability (solid, gas): Not applicable.
Ignition temperature: Not determined.
Decomposition temperature: Not determined.
Auto-ignition temperature: Product is not selfigniting.
- **Explosive properties: Product does not present an explosion hazard**
Lower: Not determined.
Upper: Not determined.
Oxidising properties Not applicable.
Vapour pressure at 20 °C: 23 hPa
Density at 20 °C: 1.08 g/cm³ (DIN 51757)
Relative density Not determined.
Vapour density Not determined.
Evaporation rate Not determined.
Solubility in / Miscibility with water: Fully miscible.
- **Viscosity**
Dynamic: Not determined.
Kinematic: Not determined.

9.2. Other information - No further relevant information available

Section 10 - Stability and reactivity

10.1. Reactivity - No further relevant information available

10.2. Chemical stability - Thermal decomposition / conditions to be avoided:
No decomposition if used and stored according to specifications.

10.3. Possibility of hazardous reactions:

- Reacts with acids.
- Reacts with strong oxidising agents.
- Reacts with light alloys to form hydrogen.
- Heating occurs when water is added.

10.4. Conditions to avoid: No further relevant information available.

10.5. Incompatible materials: Acids, oxidizing agent Light metals: aluminum, zinc, tin

10.6. Hazardous decomposition products: No dangerous decomposition products known.

Section 11 - Toxicological information

11.1. Information on toxicological effects

- **Acute toxicity:** Based on available data, the classification criteria are not met. LD/LC50 values relevant for classification:
- **1310-58-3 potassium hydroxide**
Oral LD50 - 333 mg/kg (rat) (OECD 425)
- **64-02-8 tetrasodium ethylenediaminetetraacetate**
Oral LD50 - 1.780 mg/kg (rat)
- **2809-21-4 1-hydroxyethane-1,1-diylbis(phosphonic acid)**
Oral LD50 - 1.878 mg/kg (rat)
Dermal LD50 - >7.940 mg/kg (rabbit)
- **C12-14-(even numbered)alkyl(hydroxyethyl)dimethyl, chlorides**
Oral LD50 >300-2.000 mg/kg (rat) (OECD 401) male
- **61791-14-8 Amines, coco alkyl, ethoxylated**
Oral LD50 - >300-2.000 mg/kg (rat)

Primary irritant effect:

- 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.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

- 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.
- Specific target organ toxicity after single exposure: Based on the available data, the classification criteria are not met.
- Specific target organ toxicity - repeated exposure: Based on the available data, the classification criteria are not met.
- Aspiration hazard:
Based on the available data, the classification criteria are not met.

Section 12 - Ecological information

12.1. Toxicity/ Aquatic toxicity:

- **1310-58-3 potassium hydroxide**
LC50/96 h - 80 mg/l (Gambusia affinis) / 45,4 mg/l (Oncorhynchus mykiss)
EC50/48 h - 40,4 mg/l (Ceriodaphnia dubia)
- **64-02-8 tetrasodium ethylenediaminetetraacetate**
LC50/96 h - >100 mg/l (fish)
EC50/24 h - >500 mg/l (Daphnia magna)
EC50/72 h - >100 mg/l (Algae, Growth inhibition test)
- **2809-21-4 1-1-hydroxyethane-1,1-diylbis(phosphonic acid)**
LC50/96 h - 368 mg/l (fish)

- **C12-14-(even numbered)alkyl(hydroxyethyl)dimethyl, chlorides**
NOEC 28 d - 0,16 mg/l (Danio rerio) (OECD 210)
0,022 mg/l (Algae, Growth inhibition test)
1.000 mg/l (Bacteria)
NOEC 21 d - 0,1 mg/l (Daphnia magna) (OECD 211)
LC50/96 h - 4,2 mg/l (Danio rerio) (OECD 203)
EC50/48 h 0,19 mg/l (Daphnia magna) (OECD 202)
EC50/72 h - 0,14 mg/l (Desmodesmus subspicatus) (OECD 201)
EC50/3h - 19 mg/l (bel) (OECD 209)
- **61791-14-8 Amines, coco alkyl, ethoxylated**
NOEC 72 h - >0,1-1 mg/l (Algae, Growth inhibition test)
OECD 301 B - >60 % () (28 d)
LC50/96 h >10-<100 mg/l (Daphnia magna) (DIN 38412)
>1-<10 mg/l (fish) (OECD 203)

12.2. Persistence and degradability: No further relevant information available.

12.3. Bioaccumulative potential: No further relevant information available

12.4. Mobility in soil: No further relevant information available.

- **Additional ecological information/ General notes:**
Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.

12.5. Results of PBT- and vPvB- assessment

- **PBT and vPvB:** Not applicable

12.6. Other adverse effects: No further relevant information available.

Section 13 - Disposal considerations

13.1. Waste treatment methods

- **Recommendation:**
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Uncleaned packaging / recommendation:**
Disposal according to official regulations.
- **Recommended cleaning agent:**
Water, if necessary with the addition of cleaning agents.

Section 14 - Transport information

14.1. UN-Number

- **ADR, IMDG, IATA: UN1814**

14.2 UN proper shipping name

- **ADR: 1814 POTASSIUM HYDROXIDE SOLUTION**
(Accord européen relatif au transport international des marchandises Dangereuses par Route)

- **IMDG, IATA:** POTASSIUM HYDROXIDE SOLUTION
(International Maritime Code for Dangerous Goods)
(International Air Transport Association)

14.3. Transport hazard class(es)

- **ADR, IMDG, IATA**



Class: 8 (C5) Corrosive substances
Label: 8

14.4. Packing group- ADR, IMDG, IATA - II. / **14.5. Environmental hazards:** Not applicable

14.6. Special precautions for user/ Warning: Corrosive substances

- Kemler-code: 80
- EMS-Number: F-A,S-B
- Segregation groups: Alkalis
- Stowage Category: A
- Segregation Code : SG35 Stow "separated from" acids.

14.7. Transport in bulk according to Annex II

- **of Marpol and the IBC Code** – Not applicable
(International, Worldwide Convention for the Protection of the Marine Environment, Appendix II - Prevention of Pollution by Noxious Liquids, International Code for the Construction and Equipment of Ships for the Carriage of Dangerous Chemicals in Bulk)
- **Transport/Additional information:**
 - ADR**
 - Limited quantities (LQ) 1L
 - Excepted quantities (EQ) Code: E2
 - Maximum net quantity per inner packaging: 30 ml
 - Maximum net quantity per outer packaging: 500: 500 ml
 - Transport category 2
 - Tunnel restriction code E
 - IMDG**
 - Limited quantities (LQ) 1L
 - Excepted quantities (EQ) Code: E2
 - Maximum net quantity per inner packaging: 30 ml
 - Maximum net quantity per outer packaging: 500 ml
 - UN "Model Regulation": UN 1814 POTASSIUM HYDROXIDE SOLUTION, 8, II

Section 15 - Regulatory information

15.1. Safety, health and environmental regulations/

legislation specific for the substance or mixture/ Directive 2012/18/EU

- **Named dangerous substances** - ANNEX I - None of the ingredients is listed
- **REGULATION (EC) No 1907/2006 - ANNEX XVII** - Conditions of restriction: 3

- **National regulations**
- Technical instructions air: Class NK / share in% ≤ 2.5
- Water hazard class: WGK 2 (self-assessment): clearly hazardous to water.

15.2. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Section 16 - Other Information

- The information is based on our current level of knowledge and experience.
- The information listed does not have the meaning of assured product properties.
- The safety data sheet describes products with regard to safety requirements.

Relevant phrases

- H290 May be corrosive to metals.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 4: Acute toxicity - oral – Category 4

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Skin Corr. 1C: Skin corrosion/irritation – Category 1C

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

REACH-Verordnung - Registration, Evaluation, Authorisation and Restriction of Chemical