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

1.1. Product identifier

Product form : Mixture
Product name : MATIC L4
UFI : UKUR-J262-J00S-M02Q
Product code : CZ00031
Type of product : Cleaning agent,Detergent

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

Relevant identified uses

Main use category : Industrial use,Professional use
Use of the substance/mixture : Prostředek na nádobí pro průmyslové myčky.

1.3. Details of the supplier of the safety data sheet

Výrobce

CHRISTEYNS s.r.o.
Vítovská 453/7
CZ– 742 35 Odry – Czech Republic
Czech Republic
T +420 556 731 111
legislativa@christeyns.com - www.christeyns.com

Distributor

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legislativa@christeyns.com - www.christeyns.com

1.4. Emergency telephone number

Země	Organizace/společnost	Adresa	Telefonní číslo pro naléhavé situace	Komentář
Česká republika	Toxikologické informační středisko Klinika pracovního lékařství VFN a 1. LF UK	Na Bojišti 1 120 00 Praha 2	+420 224 919 293 +420 224 915 402	a jen při poruše +420 224 919 293 +420 224 915 402 tel 725 103 658 (jinak na tomto telefonu nemusí být toxikolog!) Dotazy na AKUTNÍ INTOXIKACE lidí a zvířat se řeší výhradně na přímých telefonních linkách TIS po 24 hod denně

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Corrosive to metals, Category 1 H290
Skin corrosion/irritation, Category 1, Sub-Category 1A H314
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS05

Signal word (CLP) : Danger
Contains : Potassium hydroxide; Sodium hydroxide

Hazard statements (CLP) : H290 - May be corrosive to metals.
H314 - Causes severe skin burns and eye damage.

Precautionary statements (CLP) : P280 - Wear eye protection, protective gloves.
P301+P330+P331+P310 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a doctor.

P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a doctor.
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor.
P390 - Absorb spillage to prevent material damage.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
tetrasodium ethylene diamine tetraacetate	CAS-no: 64-02-8 EC-No.: 200-573-9 EC Index-No.: 607-428-00-2 REACH-no: 01-2119486762-27	5 – 10	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=1500 mg/m³) Eye Dam. 1, H318 STOT RE 2, H373
Sodium hydroxide substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, LT, LV, PL, PT, RO, SE, SK, IS, NO, MK, CH, TR)	-	5 – 10	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318
Potassium hydroxide substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, PL, PT, SE, IS, NO, CH)	-	≥ 1 – < 3	Acute Tox. 4 (Oral), H302 (ATE=333 mg/kg bodyweight) Skin Corr. 1A, H314 Eye Dam. 1, H318 Met. Corr. 1, H290
ETIDRONIC ACID	CAS-no: 2809-21-4 EC-No.: 220-552-8 REACH-no: 01-2119510391-53	1 – 3	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 (ATE=1878 mg/kg bodyweight) Eye Dam. 1, H318

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits (%)**
Sodium hydroxide	-	(0.5 ≤ C < 2) Eye Irrit. 2; H319 (0.5 ≤ C < 2) Skin Irrit. 2; H315 (2 ≤ C < 5) Skin Corr. 1B; H314 (5 ≤ C ≤ 100) Skin Corr. 1A; H314
Potassium hydroxide	-	(0.5 ≤ C < 2) Eye Irrit. 2; H319 (0.5 ≤ C < 2) Skin Irrit. 2; H315 (2 ≤ C < 5) Skin Corr. 1B; H314 (5 ≤ C ≤ 100) Skin Corr. 1A; H314

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice : If you feel unwell, seek medical advice.

Inhalation : Remove person to fresh air and keep comfortable for breathing.

Skin contact : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Wash skin with plenty of water. Call a physician immediately.

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

Ingestion : If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting because of corrosive effects. Rinse mouth out with water.

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

Acute effects inhalation : Inhalation may cause irritation, cough, shortness of breath.

Acute effects skin : Causes severe burns.

Acute effects eyes : Corrosive to eyes.

Acute effects oral route : Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : All extinguishing agents can be used.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting : Use self-contained breathing apparatus and chemically protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment : Concerning personal protective equipment to use, see section 8.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Absorb spilled material with sand or earth. Shovel or sweep up and put in a closed container for disposal.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

No additional information available

7.2. Conditions for safe storage, including any incompatibilities

Material(s) to avoid : None known.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

Potassium hydroxide	
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	1 mg/m³
NPK-P (OEL C)	2 mg/m³
Remark	I - dráždí sliznice (oči, dýchací cesty), resp. kůži.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 20/2025 Sb.)

Sodium hydroxide	
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	1 mg/m³
NPK-P (OEL C)	2 mg/m³
Remark	I - dráždí sliznice (oči, dýchací cesty), resp. kůži.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 20/2025 Sb.)

DNEL and PNEC

Potassium hydroxide	
DNEL/DMEL (Workers)	
Long-term - local effects, inhalation	1 mg/m³
DNEL/DMEL (General population)	
Long-term - local effects, inhalation	1 mg/m³

Sodium hydroxide	
DNEL/DMEL (Workers)	
Long-term - local effects, inhalation	1 mg/m³
DNEL/DMEL (General population)	
Long-term - local effects, inhalation	1 mg/m³

8.2. Exposure controls

Personal protection equipment

Personal protective equipment symbol(s):

Eye and face protection

Eye protection:

Wear security glasses which protect from splashes

Skin protection

Protective equipment:

Wear suitable protective clothing

Hand protection:

Chemical resistant PVC gloves (to European standard EN 374 or equivalent)

Respiratory protection

Respiratory protection:

No respiratory protection needed under normal use conditions

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: Characteristic.
Odour threshold	: Not determined as it is not relevant for the characterization of the product
Melting point/range	: Not determined as it is not relevant for the characterization of the product
Freezing point	: Not determined as it is not relevant for the characterization of the product
Boiling point/Boiling range	: Not determined as it is not relevant for the characterization of the product
Flammability	: Not determined as it is not relevant for the characterization of the product
Explosive properties	: Not determined as it is not relevant for the characterization of the product.
Lower explosion limit	: Not determined as it is not relevant for the characterization of the product
Upper explosion limit	: Not determined as it is not relevant for the characterization of the product
Flash point	: Not determined as it is not relevant for the characterization of the product
Autoignition temperature	: Not determined as it is not relevant for the characterization of the product
Decomposition temperature	: Not determined as it is not relevant for the characterization of the product
pH	: 13,0 ± 1 (100%)
Viscosity, kinematic	: Not available
Viscosity, dynamic	: 5,92 ± 5 mPas (20°C)
Solubility	: Soluble in water.

Partition coefficient n-octanol/water (Log Kow)	: Not determined as it is not relevant for the characterization of the product
Vapour pressure	: Not determined as it is not relevant for the characterization of the product
Vapour pressure at 50°C	: Not determined as it is not relevant for the characterization of the product
Density	: 1,20 ± 0,1 g/ml
Relative density	: 1,20 at (20°C)
Relative vapour density at 20°C	: Not determined as it is not relevant for the characterization of the product
Particle characteristics	: Not applicable

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity
10.1. Reactivity
No additional information available
10.2. Chemical stability
The product is stable at normal handling and storage conditions.
10.3. Possibility of hazardous reactions
Reacts exothermically with strong acids.
10.4. Conditions to avoid
All heat sources, including direct sunlight. Overheating. Direct sunlight.
10.5. Incompatible materials
Acids.
10.6. Hazardous decomposition products
Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide.

SECTION 11: Toxicological information
11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

tetrasodium ethylene diamine tetraacetate (64-02-8)	
LD50 oral rat	1700 – 1913 mg/kg Source: EU RAR
LD50 oral	1780 mg/kg bodyweight
LC50 Inhalation - Rat (Dust/Mist)	1 – 5 mg/l/4h
Potassium hydroxide	
LD50 oral	333 mg/kg bodyweight
ETIDRONIC ACID (2809-21-4)	
LD50 oral rat	1878 mg/kg
LD50 dermal rabbit	> 3505

Skin corrosion/irritation : Causes severe skin burns.
pH: 13,0 ± 1 (100%)

tetrasodium ethylene diamine tetraacetate (64-02-8)	
pH	11.3 Source: HSDB
Potassium hydroxide	
pH	14

Serious eye damage/irritation : Assumed to cause serious eye damage
pH: 13,0 ± 1 (100%)

tetrasodium ethylene diamine tetraacetate (64-02-8)	
pH	11.3 Source: HSDB
Potassium hydroxide	
pH	14

Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified

Carcinogenicity : Not classified

ETIDRONIC ACID (2809-21-4)	
NOAEL (chronic, oral, animal/male, 2 years)	≥ 384 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
NOAEL (chronic, oral, animal/female, 2 years)	≥ 493 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Reproductive toxicity : Not classified

tetrasodium ethylene diamine tetraacetate (64-02-8)	
NOAEL (animal/male, F1)	> 250 mg/kg

ETIDRONIC ACID (2809-21-4)	
NOAEL (animal/male, F1)	≈ 294 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 415 [One-Generation Reproduction Toxicity Study (before 9 October 2017)]

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

tetrasodium ethylene diamine tetraacetate (64-02-8)	
LOAEL (oral, rat, 90 days)	60 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
LOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.015 mg/l air Animal: rat, Animal sex: female, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
NOAEL (oral, rat, 90 days)	≥ 500 mg/kg bodyweight Animal: rat, Animal sex: male
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

11.2. Information on other hazards
No additional information available

SECTION 12: Ecological information
12.1. Toxicity
Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

tetrasodium ethylene diamine tetraacetate (64-02-8)	
LC50 - Fish [1]	> 121 mg/l
EC50 - Crustacea [1]	140 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	625 mg/l waterflea
EC50 - Other aquatic organisms [2]	2.77 mg/l
EC50 72h - Algae [1]	> 60 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	50 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	25 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	≥ 25.7 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '35 d'
NOEC chronic crustacea	> 25 mg/l Daphnia magna (Water flea)

Potassium hydroxide	
LC50 - Fish [1]	Western mosquitofish (Gambusia affinis) 80 mg/l. 96 hours

Sodium hydroxide	
LC50 - Fish [1]	> 35 mg/l
EC50 - Crustacea [1]	40.4 mg/l (Ceriodaphnia)
EC50 - Other aquatic organisms [1]	> 33 mg/l waterflea

ETIDRONIC ACID (2809-21-4)	
LC50 - Fish [1]	195 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	527 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	1770 mg/l Test organisms (species): Palaemonetes pugio
NOEC (chronic)	6.75 mg/l Test organisms (species): Daphnia magna Duration: '28 d'

12.2. Persistence and degradability

MATIC L4	
Persistence and degradability	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.
tetrasodium ethylene diamine tetraacetate (64-02-8)	
Persistence and degradability	Not rapidly degradable
Potassium hydroxide	
Persistence and degradability	Not rapidly degradable
Sodium hydroxide	
Persistence and degradability	The methods for determining biodegradability are not applicable to inorganic substances.
ETIDRONIC ACID (2809-21-4)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

MATIC L4	
Partition coefficient n-octanol/water (Log Kow)	Not determined as it is not relevant for the characterization of the product
Bioaccumulative potential	No bioaccumulation.
tetrasodium ethylene diamine tetraacetate (64-02-8)	
Log Pow	-0.43
Sodium hydroxide	
Log Pow	-3.88
Bioaccumulative potential	No bioaccumulation.

12.4. Mobility in soil
No additional information available

12.5. Results of PBT and vPvB assessment
No additional information available

12.6. Endocrine disrupting properties
No additional information available

12.7. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste / unused products : Collect all waste in suitable and labelled containers and dispose according to local legislation.

HP Code : HP8 - “Corrosive:” waste which on application can cause skin corrosion.

SECTION 14: Transport information
In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number or ID number		
UN 3266	Not applicable	Not applicable

ADR	IMDG	IATA
14.2. UN proper shipping name		
CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.	Corrosive liquid, basic, inorganic, n.o.s.
Transport document description		
UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S., 8, III, (E)	Not applicable	Not applicable
14.3. Transport hazard class(es)		
8	8	8
		
14.4. Packing group		
III	Not applicable	Not applicable
14.5. Environmental hazards		
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No EmS-No. (Fire): F-A EmS-No. (Spillage): S-B	Dangerous for the environment: No
No supplementary information available		

14.6. Special precautions for user

Overland transport

Classification code (ADR) : C5
Special provisions (ADR) : 274
Limited quantities (ADR) : 5l
Excepted quantities (ADR) : E1
Packing instructions (ADR) : P001, IBC03, LP01, R001
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T7
Portable tank and bulk container special provisions (ADR) : TP1, TP28
Tank code (ADR) : L4BN
Tank special provisions (ADR) : TU42
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Hazard identification number (Kemler No.) : 80
Orange plates :

Tunnel code : E

Transport by sea

Special provisions (IMDG) : 274
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T11
Tank special provisions (IMDG) : TP2, TP27
Stowage category (IMDG) : B
Stowage and handling (IMDG) : SW2

Segregation (IMDG) : SGG18, SG35
Properties and observations (IMDG) : Reacts violently with acids. Causes burns to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y840
PCA limited quantity max net quantity (IATA) : 0.5L
PCA packing instructions (IATA) : 851
PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 855
CAO max net quantity (IATA) : 30L
Special provisions (IATA) : A3, A803
ERG code (IATA) : 8L

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)
Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)
Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)
Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)
Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)
Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (2024/590)
Not listed on the Ozone Depletion list (Regulation EU 2024/590)
Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items
Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Detergent Regulation (EC 648/2004)

Labelling of contents	
Component	**%**
EDTA and salts thereof	5-15%
phosphonates, polycarboxylates	<5%
METHYLCHLOROISOTHIAZOLINONE (AND) METHYLISOTHIAZOLINONE	

Explosives Precursors Regulation (EU 2019/1148)
Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)
Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Other information : It is recommended to pass the information from this safety data sheet in an appropriate form to the users. The information is currently to the best of our knowledge and believed to be accurate and reliable. This information relates to the specifically named product and may not be valid in combination with other products.
This safety data sheet is in compliance with 1907/2006/EEC. It is the responsibility of the user to take all necessary measures to meet local required laws and regulations. The producer is not responsible for any damage and loss due to the use of information mentioned in this safety data sheet.

Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Met. Corr. 1	H290	Calculation method
Skin Corr. 1A	H314	Calculation method

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.