

DOCZYSZCZANIE KOSTKI BRUKOWEJ 1**Material Safety Data Sheet (MSDS)**

Creation Date: 10.08.2000
Revision Date: 25.09.2015
Version: 1.0

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier: DOCZYSZCZANIE KOSTKI BRUKOWEJ 1**

1.2 Relevant identified uses of the substance or mixture and uses advised against: Super strong concentrate for degreasing and thoroughly cleaning of paving stones (stone sett, paving block/brick). Product effectively removes industrial grime, oil, fuel, tar, grease and other types of dirt.

1.3 Details of the supplier of the safety data sheet:

TENZI Sp. z o.o., 72-002 Dołuje, Skarbimierzyce 20, e-mail: info@tenzi.pl, www.tenzi.pl, tel. +48 91 3119777, fax. +48 91 3119779 E-mail address for a competent person responsible for MSDS: technolog@tenzi.pl

1.4 Emergency telephone number: +48 91 31 19 777 (mon. - fri. 8am-4pm) or 112

SECTION 2. HAZARDS IDENTIFICATION**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008**

Skin Corr. 1B H314 - Causes severe skin burns and eye damage.

Eye Dam. 1 H318 - Causes serious eye damage

2.2. Label elements

According to 1272/2008/EC*

Hazard symbols



and signal words: **DANGER**

Hazard statements:

H314 - Causes severe skin burns and eye damage.

Precautionary statements

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): Remove/Take off immediately all contaminated clothing. Rinse skin

P310 – Immediately call a POISON CENTER or doctor/physician

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405 – Store locked up.

2.3. Other hazards

Substance does not meet criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS**3.1 Substances**

Not applicable.

3.2 Mixture

DOCZYSZCZANIE KOSTKI BRUKOWEJ 1

Composition (according to: 648/2004/EC): <12% Sodium hydroxide , 5÷15% non-ionic surfactants, <5% phosphonates; excipients not classified as hazardous					
Product / ingredient name	Concentration [% weigh]	CAS / EC	Index-No.	REACH registration number	Classification
					Regulation (EC) No. 1272/2008 [CLP]
Sodium hydroxide	< 12	1310-73-2 215-185-5	011-002-00-6	01-21194578 92-27-XXXX	Skin Corr. 1A H314, Met. Corr. 1 H290
Non-ionic surfactants	< 11	68439-54-3 polymer	---	---	Eye Dam. 1 H318, Acute Tox. 4 H302
Phosphonates	< 5	2809-21-4 220-552-8	---	---	Acute Tox. 4 H302, Met. Corr. 1 H290, Eye Dam. 1 H318, skin Irrit. 2 H315

The full texts of phrases and H-symbols are in 16th section.

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation – In case of inhalation poisoning symptoms (cough, dyspnea, dizziness) move to fresh air. Lay patient down in semi-recumbent posture, physical activity may cause pulmonary edema. Keep warm and rested. Get medical attention.

Skin contact – If product comes in contact with the skin immediately remove all contaminated clothing and flush exposed area with large amounts of water. Consult a doctor in case burns or irritation occur.

Eye contact – Flush eyes with running water at least 15 minutes keeping eyelids open. Get medical attention

Ingestion – Wash out the mouth with water. Give water to drink (1-2l). DO NOT induce vomiting. If victim is fully conscious, give a charcoal tablets. Contact a doctor and show this MSDS or label. Never give anything by mouth to an unconscious person.

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

Inhalation – severe irritant. May cause severe burns and serious damage of the upper respiratory tract. Irritation may lead to chemical pneumonitis and pulmonary edema. Symptoms may include: coughing, sore throat, breathing difficulty.

Skin – corrosive, may cause severe skin burns and deep, penetrating ulcers of the skin. May cause cold and clammy skin with cyanosis or pale color.

Eyes – corrosive, may cause eye burns, chemical conjunctivitis and corneal damage (redness, intense pain), possible irreversible impairment of vision or blindness.

Ingestion – corrosive, causes burning in mouth, esophagus, throat and stomach. May cause severe damage to the digestive tract (risk of perforation) and possible death. Symptoms may include: strong pain, vomiting, diarrhea and low blood pressure.

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

Obtain medical attention. Self-contained eye wash or shower should be readily available.

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: water, foam, dry extinguishing agent, carbon dioxide. Use extinguishing measures that are appropriate to local circumstances and surrounding environment.

Extinguishing media which shall not be used for safety reason: DO NOT use a solid water stream.

5.2. Special hazards arising from the substance or mixture

Product is non-flammable.

5.3. Advice for firefighters

Firefighters should wear self-contained breathing apparatus and full protective clothing. In case of fire warn the people nearby. Evacuate unprotected and untrained personnel from hazard area. If possible, remove the containers away from the influence of fire and high temperature. Water may be used to keep fire-exposed containers cool until fire is out. The after burning residues should be removed.

DOCZYSZCZANIE KOSTKI BRUKOWEJ 1**SECTION 6. ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel: chemical resistant gloves thickness of 0.11 mm, safety glasses / goggles.

For emergency responders: self-contained breathing apparatus, protective clothes, chemical resistant gloves thickness of 0.11 mm, safety glasses / goggles.

Avoid skin and eyes contact. Provide proper ventilation.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground. Prevent from entering into soil.

6.3. Methods and material for containment and cleaning up

In case of unexpected release substance into environment inform on emergency, keep away from source of ignition. Prevent spills from entering sewers, surface water or groundwater. If it is possible confine and contain the spill by closing liquid flow, damage container put into protect leak proof wrapping. For large spill make a dike around the outside edges of the spill. Clean-up materials store for disposal as hazardous waste. Decontaminate polluted area with water. For small spill use absorbent materials (sand solid, sawdust, fines limestone) and store for disposal as hazardous waste. Decontaminate polluted area with water

6.4. Reference to other sections

See section 8 and 13.

SECTION 7. HANDLING AND STORAGE**7.1. Precautions for safe handling**

Please note that you need to be carefully while working with this product. Use personal protection recommended in section 8.2

Mix only with water. DO NOT mix with other chemical substances.

People with skin allergy or respiratory system problems should not have contact with this product.

After usage keep container tightly closed. Keep away from unauthorized people.

Use only adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Store in a tightly close, original plastic container. Store this product in dry environment that will be maintained at temperature between 5⁰C - 35⁰C. Store in good ventilated area with easy clean alkali resistant floor. DO NOT expose to sunlight. Keep away from heat, sparks, flame and source of ignition.

7.3. Specific end use(s)

No data available.

SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION**8.1. Control parameters**

Please check any national occupational exposure limit values in your country.

TLV-TWA, TLV-STEL and TLV-C values for substances (according to MSDS or Chemical Safety Report):

Sodium hydroxide (data for high concentrations substance):

TLV-TWA: 0,5 mg/m³

TLV-STEL: 1 mg/m³

Non-ionic surfactants (data for high concentrations substance):

Not identified.

Phosphonates (data for high concentrations substance):

Not identified.

DNEL /PNEC values for substances (according to MSDS or Chemical Safety Report):

Sodium hydroxide (data for high concentrations substance):

DNEL, PNEC: not identified

Non-ionic surfactants (data for high concentrations substance):

DNEL, PNEC: not identified

Phosphonates (data for high concentrations substance):

DNEL, PNEC: not identified

DOCZYSZCZANIE KOSTKI BRUKOWEJ 1

NOTE: When the concentration of substance is known, personal protective equipment should be chosen based on: substance concentration on a workplace, exposure time and operations performed by the employee. In emergency situations, if substance concentration on the workplace is unknown, personal protection of highest class level should be used.

8.2. Exposure controls

RESPIRATORY PROTECTION: in case of insufficient ventilation, wear suitable respiratory equipment - masks with gas and vapour protection

HAND PROTECTION: chemical resistant gloves thickness of 0.11 mm

EYE/FACE PROTECTION: safety glasses, in case of contact with face wear face-shield.

SKIN PROTECTION: protective clothing

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

APPEARANCE/FORM: biphasic liquid

ODOUR: characteristic for this composition

ODOUR THRESHOLD: not identified

pH – 14±1

MELTING/FREEZING POINT: not identified

INITIAL BOILING POINT AND BOILING RANGE: not identified

FLASH POINT: not identified

EVAPORATION RATE: not identified

FLAMMABILITY (SOLID,GAS): not identified

UPPER/LOWER FLAMMABILITY (UEL/LEL): not identified

VAPOUR PRESSURE: not identified

VAPOUR DENSITY: not identified

RELATIVE DENSITY: 1,097±0,020 g/cm³

SOLUBILITY:

a) WATER – soluble

b) ORGANIC SOLVENT – not identified

PARTITION COEFFICIENT N-OCTANOL/WATER: not identified

AUTO-IGNITION TEMPERATURE: not identified

DECOMPOSITION TEMPERATURE: not identified

VISCOSITY: not identified

EXPLOSIVE PROPERTIES: not identified

OXIDISING PROPERTIES: not identified

9.2. Other information

REFRACTIVE INDEX – 22,8 % Brix* ± 5%

* - Degrees Brix is the content of an aqueous solution. One degree Brix is 1 gram of sucrose in 100 grams of solution and represents the strength of the solution as percentage by weight (%w/w)

SECTION 10. STABILITY AND REACTIVITY**10.1 Reactivity**

Mixture is non reactive.

10.2 Chemical stability

Stable under recommended storage conditions (see point 7)

10.3 Possibility of hazardous reactions

May react violently with acids to release heat.

10.4 Conditions to avoid

Avoid storage unprotected from heat and not well-ventilated area. Avoid long-term expose to sunlight..

10.5 Incompatible materials

Avoid contact with acids and strong oxidizers.

10.6 Hazardous decomposition products

Unknown.

SECTION 11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****ACUTE TOXICITY:**

-INHALATION: Severe irritant. May cause severe burns and serious damage of the upper respiratory tract. Irritation may lead to chemical pneumonitis and pulmonary edema. Symptoms may include: coughing, sore throat, breathing difficulty

-DIGESTIVE SYSTEM: Corrosive. Causes burning in mouth, esophagus, throat and stomach. Causes severe damage to the digestive tract (risk of perforation) and possible death. Symptoms may include: strong pain, vomiting, diarrhea and low blood pressure.

-SKIN CONTACT: Causes severe skin burns, may cause deep, penetrating ulcers of the skin. May cause cold and clammy skin with cyanosis or pale color.

- EYE CONTACT: Corrosive, may cause serious eye damage, chemical conjunctivitis and corneal damage (redness, intense pain), possible irreversible impairment of vision or blindness.

ATEmix= 4040 (Acute toxicity, oral)

DETAILS OF PARTICULAR COMPONENTS (according to substances's MSDS)**Sodium hydroxide (data for high concentrations substance):**

LD50 500 mg/kg (rat, oral)

Toxic if swallowed. Ingestion cause burns and damage to the mouth and esophagus. Risk of perforation in the esophagus and stomach, shock or collapse.

Acute toxicity (inhalation): no data available. May cause irritation and burns of mucous membranes.

Acute toxicity (dermal): no data available

Acute toxicity (other exposure): no data available

Skin corrosion/irritation: Corrosive, may cause severe burns. May cause deep, penetrating ulcers of the skin and skin necrosis.

Serious eye damage/eye irritation: irreversible burns, necrosis corneal, risk of blindness.

Respiratory or skin sensitisation: Not sensitising

Germ cell mutagenicity: no data classified

Carcinogenicity: no data classified

Reproductive toxicity: no data available

Specific target organ toxicity (single exposure): no data available

Specific target organ toxicity (repeated exposure): no data available

Aspiration hazard: Corrosive to the respiratory tract

Non-ionic surfactants (data for high concentrations substance):

LD50> 300-2000 mg / kg (rat, oral)

LD50> 2000 mg / kg (rat, dermal)

Skin corrosion / irritation: not irritating (rabbit)

Serious eye damage / irritation: irritant, risk of serious damage to eyes (rabbit)

Germ cell mutagenicity: Ames test: not mutagenic

Carcinogenicity: not available

Reproductive toxicity: no data

Toxic effects on target organs - single exposure: no data

Toxic effects on target organs - repeated exposure: no data

Aspiration hazard: No data

Phosphonates (data for high concentrations substance):

LD50: 1800 mg/kg (mouse, oral)

LD50: 3000 mg/kg (rat, inhalation)

Skin corrosion/irritation: The product is classified as irritant to skin (Skin irrit.2)

Serious eye damage/eye irritation: The product was classified as causing severe eye damage (Eye Dam. 1)

Respiratory or skin sensitisation: Not classified

Germ cell mutagenicity: no mutagenic potential

Carcinogenicity: no carcinogenic potential

Reproductive toxicity: not classified

Specific target organ toxicity (single exposure): no data available

Specific target organ toxicity (repeated exposure): no data available

Aspiration hazard: Not classified

SECTION 12. ECOLOGICAL INFORMATION

DOCZYSZCZANIE KOSTKI BRUKOWEJ 1**12.1 Toxicity****Sodium hydroxide (data for high concentrations substance):**

Toxic to fish and aquatic invertebrates and may adversely affect non-target plants.

- for fish: LC0 157 mg/l/48h, LC50 189 mg/l/48h, LC100 213 mg/l/48h

Non-ionic surfactants (data for high concentrations substance):

LC50 > 1-10 mg/l/96h (OECD 203) (Cyprinus carpio)

EC50 > 1-10 mg/l/48h (OECD 202) (Daphnia magna)

EC50 > 1-10 mg/l/72h (OECD 201) (Scenedesmus subspicatus)

Phosphonates (data for high concentrations substance):

-for Daphnia: EC50: 292 mg/l/48h

- for fish: LC50: 350 mg/l/96h

12.2 Persistence and degradability

The surfactants contained within the product comply with the biodegradability criteria as laid down in Regulation (EC) No 648/2004 on detergents.

Sodium hydroxide (data for high concentrations substance):

Readily Biodegradable in water and in air. Substance rapidly dissolves and subsequently dissociates in water. Sodium hydroxide is converted into carbonates.

Non-ionic surfactants (data for high concentrations substance):

Readily biodegradable.

Degree of elimination: >70% after 28 days, according to OECD 301A

Degree of elimination: >60% after 28 days, according to OECD 301B

Phosphonates (data for high concentrations substance):

No data available

12.3 Bioaccumulative potential**Sodium hydroxide (data for high concentrations substance):**

No data available.

Non-ionic surfactants (data for high concentrations substance):

No data available.

Phosphonates (data for high concentrations substance):

No data available.

12.4 Mobility in soil

The product is water soluble and may spread in groundwater systems.

12.5 Results of PBT and vPvB assessment

This substance/mixture does not meet the PBT and vPvB criteria of REACH, annex XIII.

12.6 Other adverse effects

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS**RESIDUES AND WASTES**

DO NOT mix with other liquid wastes. DO NOT empty into drain. Dispose of this material and its container at hazardous or special waste collection point.

13.1. WASTE TREATMENT METHODS

Contaminated containers should be completely emptied. Several times rinse container (or equivalent) promptly after emptying. Empty container can be stored in containers for collection of plastic packaging, or can be delivered to specialized company for recycling.

Disposal should be in accordance with the national/international regulations.

SECTION 14. TRANSPORT INFORMATION

Trade name: **DOCZYSZCZANIE KOSTKI BRUKOWEJ 1**

14.1. UN Number: 1719

14.2. UN proper shipping name: CAUSTIC ALKALI LIQUID, N.O.S.(Sodium hydroxide)

14.3. Transport hazard class(es): ADR class. 8

14.4. Packing group: III

DOCZYSZCZANIE KOSTKI BRUKOWEJ 1

- 14.5. Environmental hazards:** Product is not dangerous for environment
14.6. Special precautions for user: For more details see Sections 6 and 8
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: no data available

Warning label:

**SECTION 15. REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

- 1) COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- 2) REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents
- 3) COMMISSION REGULATION (EC) No 907/2006 of 20 June 2006 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes III and VII thereto
- 4) REGULATION (EC) No 1336/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 amending Regulation (EC) No 648/2004 in order to adapt it to Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
- 5) COMMISSION REGULATION (EC) No 551/2009 of 25 June 2009 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes V and VI thereto (surfactant derogation)
- 6) REGULATION (EU) No 259/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 14 March 2012 amending Regulation (EC) No 648/2004 as regards the use of phosphates and other phosphorus compounds in consumer laundry detergents and consumer automatic dishwasher detergents
- 7) REGULATION (EC) No 273/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 February 2004 on drug precursors)
- 8) REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

15.2. Chemical safety assessment

For mixture: A Chemical Safety Assessment has not been carried out.

For substance:

Sodium hydroxide: A Chemical Safety Assessment has been carried out.

Non-ionic surfactants: No data available.

Phosphonates: A Chemical Safety Assessment has not been carried out.

SECTION 16. OTHER INFORMATION

Information above are based on current knowledge of product on its current form. All data are presented in order to take into account safety requirements priority and not to guarantee special properties of the product. If product usage conditions are not under manufacturer control, responsibility for safe use lies with the person that uses them.

The employer is obliged to inform all employees, who have contact with the product, about the risk and safety measures specified in the data sheet.

Safety data presented above were prepared based on safety characteristics of substances used by the producer to compose the product and based on regulations for handling dangerous substances and their preparation.

Classification of chemical mixture was done with calculation methods, based on the content of hazardous ingredients.

The full list of phrases and H symbols from Section 2 and 3:

Skin Corr. 1A – Corrosive to skin, category 1A

Eye Dam. 1 – Serious eye damage, category 1

DOCZYSZCZANIE KOSTKI BRUKOWEJ 1

Met.Corr 1 – Substance/Mixture is corrosive to metals, category 1
Acute Tox. 4 – Acute toxicity, category 4
Skin Irrit. 2 – Causes skin irritation, 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.

More information on the product can be found on the specific technical data sheet which is available on www.tenzi.pl.

Training: Course participants should be trained about how to handle this hazardous substance, about safety and work hygiene. Drivers should also be trained and obtain proper certification in accordance with the ADR requirements.

Expiry date: 36 months from the production date (if product is stored according to the producer recommendations)

Changes compared to the previous version:

- section 6,8 - thickness of gloves Updated cards versions are now available on www.tenzi.pl

This Material Safety Data Sheet contains 8 pages. Changes in the content by unauthorized persons is prohibited.

Skarbimierzyce 25.09.2015