

Material Safety Data Sheet

Creation Date: 19.05.2011

SECTION 1. Identification of the mixture and of the company/undertaking**1.1. Product identifier: TOP GRILL, TOP GRILL GT****1.2. Relevant identified uses of the substance or mixture and uses advised against:** Ready to use preparation for cleaning grills and ovens.**1.3. Details of the supplier of the safety data sheet:** TENZI Sp. z o.o., 72-002 Dołuje, Skarbimierzyce 18, e-mail: tenzi@tenzi.pl, www.tenzi.pl tel. +48 91 31 19 777, fax +48 91 31 19 779**1.4. Emergency telephone number:** +48 91 31 19 777 (Mon-Fr. 8-16); or 998**SECTION 2. Hazards identification****2.1. Classification of the mixture**

C – Corrosive

R35 – Causes severe burns

2.2. Label elements

C – Corrosive

R35 – Causes severe burns

S24/25 – Avoid contact with skin and eyes.

S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 – After contact with skin, wash immediately with plenty of water

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection

S45 – In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

S1/2 – Keep out of the reach of children

**2.3. Other hazards**

Keep only in original packaging

SECTION 3. Composition / information on ingredients**Composition (according to: 648/2004/WE):** < 5% non-ionic and amphoteric surfactants, < 5% soap; remaining components – potassium hydroxide, auxiliary components.

Hazardous ingredients	Concentration [% weight]	CAS Number	WE Number	Index Number	Caution signs	R signs
Potassium hydroxide	< 17	1310-58-3	215-181-3	019-002-00-6	C, Xn	R22, R35
Non-ionic surfactants	< 5	68515-73-1	208-407-7	---	Xi	R41
Amphoteric surfactants	< 5	61789-40-0	263-058-8	---	Xi	R36
Soap	< 5	---	---	---	Xi	R36/38

The full texts of R symbols are in section 16.

SECTION 4. First aid measures

4.1. Description of first aid measures

INHALATION – In case of inhalation poisoning symptoms (cough, shortness of breath, giddiness) move to fresh air. Ensure the calm in half-lying or half-sitting position, exercise can cause emphysema. Protect against heat loss. Seek medical advice.

SKIN CONTACT – In case of clothes poisoning, immediately take them off and rinse the skin with plenty of water (current water is the best). In case of the skin irritation or burns consult a doctor.

EYE CONTACT – In case of contact with eyes, rinse them immediately with plenty of cold water (at least during 15 minutes) keep the eyes open, seek medical advice.

INGESTION – In case of ingestion, do not cause vomiting. Give egg white or milk to drink. Do not give any other neutralizing agents. Immediately consult a doctor, show label if possible

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

INHALATION: highly irritating, can cause serious damage to the upper respiratory tract, burns, possible chemical pneumonitis and pulmonary edema. Symptoms - cough, sore throat, difficulty breathing.

SKIN CONTACT: corrosive, potentially serious burns, wounds can be formed, deep ulcers, skin cold, softened, very pale.

EYES CONTACT: corrosive, can cause burns, damage to the cornea and conjunctiva (redness, pain), leading to irreversible vision loss and even blindness.

INGESTION: Corrosive, causes severe burns to mouth, throat, stomach, severe gastrointestinal tissue damage (risk of perforation) may lead to death, the symptoms - pain, vomiting, diarrhea, low blood pressure.

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

Seek medical attention. At work needed access to fresh water and preparation to eye wash.

SECTION 5. Firefighting measures**5.1. Extinguishing media**

Appropriate to the environment surrounding the product.

Extinguishing media which shall not be used for safety reasons: All known extinguishing media can be used

5.2. Special hazards arising from the substance or mixture

Non-flammable mixture.

5.3. Advice for firefighters

Use self-contained breathing apparatus and chemically protective clothing.

In case of fire inform all persons nearby on fire, evacuate third persons from danger area, call the call fire brigade. If possible remove the containers away from the influence of fire and high temperature. If impossible cool the container by stream of water. The after burning residues should be removed.

SECTION 6. Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Protective resistant clothing, self-contained breathing apparatus; protective gloves, protective glasses. Avoid direct skin and eyes contact; ensure suitable ventilation

6.2. Environmental precautions

Avoid release to the environment. Prevent product from entering drains, groundwater and surface water.

6.3. Methods and material for containment and cleaning up

In case of unintended release mixture into environment inform on emergency and remove the source of leak. Prevent from entering sewers. If it is possible eliminate the leak (close liquid flow, make tight, damaged container put into protect leak proof wrapping). For huge leak, absorb the place where it can be accumulated, pump out if possible. Small quantity of leak absorb by inflammable absorbing material (sand, solid, sawdust, fines limestone), and next place in the appropriate waste container- pass to utilization. Polluted surface wash out.

6.4. Reference to other sections

See sections 8 and 13.

SECTION 7. Handling and storage**7.1. Precautions for safe handling**

Handle with preparation very carefully. Require use the appropriate individual protection equipment – see section 8.
Mixing only with water. Under no circumstances do not mix with other chemical substances.
Person with skin or respiratory system allergy should not have contact with this substances.
Avoid risks – before usage read operating instruction carefully.
After usage close tightly, keep away from unauthorized persons.
During operation with substances ensure good air-ventilation room in order to avoid inhalation poisoning.

7.2. Conditions for safe storage, including any incompatibilities

Keep only in original container made from plastic (polyethylene with the high quality of HDPE). Do not pour to replaceable containers. Keeping the container in dry, tightly closed rooms with temperature + 5 ÷ 30° C with the good ventilation, rooms should have acid-resistant floor. Keep away from sun and heat. Keep away from ignition and fire sources.

7.3. Specific and use(s)

No data

SECTION 8. Exposure controls / personal protection**8.1. Control parameters**

Control parameters of concentration (in acc. to Ordinance of Minister of Labour and Social Policy from 29th of November 2002, (Journal of Law, No 217, item 1833 with further amendments – Journal of Law No 212, item 1796, from 10th of October 2005)):

Potassium hydroxide (data for the concentrated substance):

NDS: 0,5 mg/m³

NDSCh: 1 mg/m³

Non-ionic surfactants (data for the concentrated substance):

NDS, NDSCh: - no data available

Amphoteric surfactant (data for the concentrated substance):

NDS, NDSCh: - no data available

Soap (data for the concentrated substance):

NDS, NDSCh: - no data available

Recommendations to the procedure of monitoring hazardous substances in air – method of measurements:

- Ordinance of the Minister of Health from 20th April 2005 on test and measurements of the factors harmful for work environment (Journal of Law No 73, item 645)

- PN-89/Z-01001/06 – Air protection against pollution.. - names, definitions and units. Terminology concerning test of air pollution around workplaces.

- PN-89/Z-04008/07 – Air protection against pollution. Samples. The principles of getting samples of air around workplace and result analysis.

- PN-EN-689:2002 – Air around workplace- Guidelines of assessment of inhalation exposure on chemical substances by comparison to acceptable concentration rates and measurement strategy.

Notice: When the concentration of substance is known, personal protection should be chosen including this concentration around workplace, time of exposure and operations performed by worker. In emergency, if the concentration around workplace is unknown, personal protection of high protection class must be used.

8.2. Exposure controls

Used personal protection should comply with the requirements of Ordinance of the Minister of Economy from 21st December 2005 on essential requirements of personal protection measures (Journal of Law No. 259, item 2173):

RESPIRATORY PROTECTION: In the absence of mechanical ventilation is recommended to use gas mask with the filter pair.

HAND PROTECTION: Protective gloves.

EYE PROTECTION: Protective glasses.

SKIN PROTECTION: Protective drill clothing.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: liquid
Odour: characteristic
Odour threshold: no data available
pH: 14
Melting point/freezing point: no data available
Initial boiling point and boiling range: no data available
Flash point: no data available
Evaporation rate: no data available
Flammability (solid, gas): no data available
Upper/lower flammability or explosive limits: no data available
Vapour pressure: no data available
Relative density: 1,030 ± 0,020 g/cm³
Solubility(ies): full
Partition coefficient: n-octanol/water: no data available
Auto ignition temperature: no data available
Decomposition temperature: no data available
Viscosity: no data available
Explosive properties: no data available
Oxidising properties: no data available

9.2. Other information

Index of refraction – 12,5 % Brix* ± 5%
*- presented as weight % of sucrose content in water solution

SECTION 10. Stability and reactivity**10.1. Reactivity**

No data available.

10.2. Chemical stability

Stabile under normal storing conditions, see section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Strong heated rooms without ventilation. Protect from long term exposure on light.

10.5. Incompatible materials

Acids, strong oxidizers.

10.6 Hazardous decomposition products

No data available.

SECTION 11. Toxicological information**EXPOSURE**

-**RESPIRATORY:** highly irritating, can cause serious damage to the upper respiratory tract, burns, possible chemical pneumonitis and pulmonary edema. Symptoms - cough, sore throat, difficulty breathing.

-**INGESTION:** corrosive, causes severe burns to mouth, throat, stomach, severe gastrointestinal tissue damage (risk of perforation) may lead to death, the symptoms - pain, vomiting, diarrhea, low blood pressure.

-**SKIN CONTACT:** corrosive, potentially serious burns, wounds can be formed, deep ulcers, skin cold, softened, very pale.

-**EYES CONTACT:** corrosive, can cause burns, damage to the cornea and conjunctiva (redness, pain), leading to irreversible vision loss and even blindness.

DETAILS OF PARTICULAR COMPONENTS:**Potassium hydroxide (data for the concentrated substance):**

LD50 365 mg/kg (rat, orally)

Local reaction:

- contact with skin: causes burns (rabbit)
- contact with eyes: causes burns (rabbit)
- consumption: harmful
- inhalation: high irritating

If affected skin is not treated promptly, badly healing blisters are formed which leave scars. Affection of hands and fingers with the weak solution may be dangerous, because of painful irritation with delayed appearance (even after some hours), where it may be too late to provide an effective aid.

Non-ionic surfactants (data for the concentrated substance):

Irritating to skin and eyes. Vapours may cause irritation of respiratory system.

LD50 - 5000 mg/kg (rat, orally)

Amphoteric surfactants (data for the concentrated substance):

Irritating to eyes.

LD50 > 1500 mg/kg (orally)

LD50 > 600 mg/kg (skin)

Soap (data for the concentrated substance):

Irritating to eyes.

May cause sensitization by skin contact.

May cause irritate mucosa and respiratory system.

SECTION 12. Ecological information

Surface-active agents contained in preparation comply with the biodegradability criteria pursuant to Ordinance EC 648/2004 on detergents.

ECOTOXICITY EFFECTS:**Potassium hydroxide (data for the concentrated substance):**

You have to protect from penetrate this product to ground water, ponds and sewage system.

Very harmful to fish and aquatic organisms. Do not empty into drains.

Ecotoxicity:

LC50 – 80 mg/l/96h (Gambusia affinis).

Non-ionic surfactants (data for the concentrated substance):

Easy and fast biodegradable.

BZT/ChZT > 80% after 28 days

Ecotoxicity:

- for fishes: LC50 > 100 mg/l

- for bacteriums: EC0 > 100 mg/l (OECD 301)

Amphoteric surfactants (data for the concentrated substance):

Readily biodegradable

logPow: 1,28 – 3,63

BCF: 71

Soap (data for the concentrated substance):

No data

SECTION 13. Disposal considerations**13.1. Waste treatment methods**

Do not mix the substance with other liquid wastes. Do not enter to the sewage. The product should be totally used pursuant to its recommendation, if impossible the product or residues must be disposed as special wastes.

Waste code and type: 07 06 04 – other organic solvents, washing liquids and mother liquors

Code classification pursuant to the Ordinance of the Minister of Environment from 27th September 2001 on waste records (Journal of Law No 112, item 1206).

PACKAGING:

Polluted packaging should be totally empty. Empty container rinse with water several times, which should be disposed as

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preparation. Empty packaging can be stored in containers designated to the collecting the plastic or refer to company specialized in utilization.

Comply with the regulations from Act from 27th April 2001 on wastes (Journal of Law No 62, item 628) with further amendments.

Comply with the regulations from Act from 11th May 2001 on packaging and packaging waste (Journal of Law No 63, item 638) with further amendments.

Waste code and type: 15 01 02 - plastic packaging, 15 01 10 packaging containing residues of or contaminated by dangerous substances.

SECTION 14. Transport information

TRADE NAME: TOP GRILL, TOP GRILL GT

14.1. UN Number: 1719

14.2. UN proper shipping name: Caustic alkali liquid, N.O.S

14.3. Transport hazard class(es): ADR 8

14.4. Packing group: III

14.5. Environmental hazards: see section 13

14.6. Special precautions for user: see sections 6 and 8

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: does not apply

WARNING LABEL:

**SECTION 15. Regulatory information**

ONLY FOR PROFESSIONAL USE

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

This Material Substance Data Sheet was prepared on the basis on following regulations:

- Act from 25th February 2011 on chemicals and their mixtures (Journal of Law No 63, item 322).
- Ordinance of the Minister of Health from 28th September 2005 on hazardous substances record ant their classification and symbols (Journal of Law No 201, item 1674 and 1675).
- Ordinance of the Minister of Health from 3rd July 2002 on Material and Hazardous Substances Safety Data Sheet (Journal of Law No 140, item 1171) and Ordinance of the Minister of Health from 14th December 2004 changing the ordinance on Material and Hazardous Substances Safety Data Sheet (Journal of Law No 2, item 8).
- Ordinance of the Minister of Health from 2nd September 2003 on criteria and classification of chemical substances and chemical preparations (Journal of Law No 171, item 1665 and 166) and Ordinance of the Minister of Health from 29th October 2004 changing the ordinance on criteria and classification of chemical substances and chemical preparations (Journal of Law No 243, item 2440).
- Ordinance of the Minister of Health from 2nd September 2003 on labeling of chemical substances and chemical preparations (Journal of Law No 2003, No 173, item 1679) and Ordinance of the Minister of Health from 9th November 2004 changing the ordinance on labeling of chemical substances and chemical preparations (Journal of Law 2004, No 260, item 2595).
- Ordinance of the Minister of Health from 14th August 2002 on obligation of handing-over the Material Substance Data Sheets non classified as hazardous (Journal of Law No 142, item 1194).
- Ordinance of the Minister of Health from 17th January 2003 on information on hazardous substances which do not required handing-over the Material Substance Data Sheet (Journal of Law No 19, item 1701).
- Act from 26th June 1974, Labor Code (Journal of Law No 21, 1998r, item 94).
- Ordinance of the Minister of Economy and Labor from 5th July 2004 on limitation of the prohibition and production conditions, turnover and use of hazardous substances or substances containing their products (Journal of Law No 11, item 1762) and Ordinance of the Minister Economy and Labour from 21st February 2005 Journal of Law No 39, item 1796, from 4th July 2006. Journal Of Law 2006, No 127, item 887 , from 11th December 2006. Journal of Law 2006, No 239, item 1731, from 29th December 2006. Journal of Law 2007, No 1, item 1) changing the ordinance on limitation of the prohibition and

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production conditions, turnover and use of hazardous substances or substances containing their products.

- Directive (EC) no 648/2004 of European Parliament and Council from 31st March 2004 on detergents and Directive of European Commission (EC) No 907/2006 changing the directive (EC) no 648/2004 of European Parliament and Council on detergents in order to adjustment of its attachments III and VII.

- Directive (EC) no 1907/2006 of European Parliament and Council from 18th December 2006 on register, assessment and issue permissions and using the limitation of chemicals (REACH), establishing the European Chemicals Agency, changing the directive 1999/45/EC and annulling the directive (EEC) Council No 793/93 and directive of Commission 9EC) no 1488/94, as also Directive of Council 76/769/EEC and directive of Commission 91/155/EEC, 93/67/EEC, 93/105/EEC and 2002/21/EC.

15.2. Chemical safety assessment

There has been a chemical safety assessment

SECTION 16. Other information

Aforementioned information are worked out on the basis of the current state of art and product as it is used. Data concerning this product are presented in order to comply with the security requirements and not to guarantee its special properties. In case when use conditions are not under producer's control, the responsibility for safety use lies on user.

The employer is obliged to inform all employees, who have a contact with this product, on hazardous and personal protection listed in this Material Substances Data Sheet.

This Material Safety Data Sheet is worked out on the basis of Materials Safety Data Sheets attached to the preparation composition by producers and on the basis of regulations on hazardous substances and chemical preparations.

The classification was made on the basis of maximum concentration of hazardous substances.

The full text of any R phrases referred to under heading 3 of the Safety Data Sheets.

C – Corrosive

Xi – Irritating

Xn – Harmful

R21/22 – Harmful in contact with skin and if swallowed

R22 – Harmful if swallowed

R35 – Causes severe burns

R36/38 – Irritating to eyes and skin

R41 – Risk of serious damage to eyes

Detail principles of use the product are on Technical Data Sheet on www.tenzi.pl

Trainings: Persons dealing with the hazardous substances marketing should be trained with regard to operating, and health and safety. Drivers should be trained and obtain proper certification in accordance to ADR regulations.

The product is submitted to **Inspector of Chemical Substances and Preparations.**

Date of expiry in normal conditions – 36 months from the production date.

Amendments to the last version:

- General update. Update on MSDS available on www.tenzi.pl

This Material Safety Data Sheet is uniform document containing 7 pages.

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