

## Material Safety Data Sheet

Creation Date: 25.05.2012  
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### 1. SECTION 1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

**1.1 Identification of the preparation: GRAN KAM AGD**

**1.2 Use of the preparation:** Product for removing limescale from household appliances

**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](mailto:info@tenzi.pl), [www.tenzi.eu](http://www.tenzi.eu), tel. +48 91 3119777, fax. +48 91 3119779

**1.4 Emergency telephone number:** 112

### SECTION 2. Hazards identification

**2.1. Classification of the mixture**

The preparation is classified as dangerous in accordance with applicable regulations (Regulation of the Minister of Health of 10 August 2012 on the criteria and classification of chemical substances and mixtures (Journal of Laws No. 0, Pos. 1018)).

Xi - Irritant

R36/38 - Irritating to eyes and skin

R52/53 - Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment

**2.2. Label elements**

Xi - Irritant

R36/38 - Irritating to eyes and skin

R52/53 - Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment

S26 - In case of contact with eyes, rinse immediately with water and seek medical advice

S37 - Wear suitable gloves

S46 - If swallowed, seek medical advice immediately - show the label

S61 - Avoid release to the environment. Refer to special instructions safety data sheets

S2 - 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):** >80% inorganic acids; remaining elements - support substances

Hazardous ingredients	Concentration [% weight]	CAS Number	WE Number	Index	Classification	
					WE 1272/2008	1999/45/WE
sulfamic acid	> 80%	5329-14-6	226-218-8	016-026-00-0	Skin Irrit. 2 H315, Eye Irrit. 2 H319, Aquatic Chronic 3. H412	Xi, R36/38, R52/53

The full texts of R and H symbols are in section 16.

REACH Number :

sulfamic acid: 01-2119488633-28-XXXX

**SECTION 4. First aid measures****4.1. Description of first aid measures**

**Inhalation** - In case of inhalation poisoning symptoms (cough, shortness of breath, dizziness) move to fresh air. If necessary, seek medical attention.

**Skin Contact**- in case of the contamination of clothes immediately remove it, wash the skin with the large amount of water (best current). In case of the appearance of skin changes or burns see the doctor.

**Eyes contact** - wash polluted eyes with a lot of cool water (at least for 15 minutes) dividing the eyelid individually, seek medical advice

**Consumption** - If swallowed, do not induce vomiting. Give to drink plenty of water. Immediately consult a doctor if you can show the label.

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

**Inhalation** - after exposure to dust irritation (cough, shortness of breath) may cause pulmonary edema, headaches and dizziness

**Skin Contact** - irritating to skin

**Eyes** - Irritating, causing pain and tearing, light sensitivity

**Consumption** - if swallowed can cause irritation of mucous membranes in the mouth, throat, esophagus and gastrointestinal tract, vomiting, diarrhea, drop in blood pressure, breathing problems

Symptoms may be delayed up to 24 hours of exposure

**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. Under the influence of the highest temperature toxic gasses are coming into existence: nitrogen oxides, sulphur dioxide

**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. Do not allow the firefighting contaminated water for getting to the sewage system and surface waters or soil-grown.

**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 .

Protect drains through the embankment, to prevent the penetration of the formulation to surface water and groundwater; Avoid direct contact with the released substance. Spilled product should be collected dry and place in a container for recycling.

**6.4. Reference to other sections**

See sections 8 and 13.

**SECTION 7. Handling and storage****7.1. 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.

**7.2. Specific and use(s)**

No data

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

Regulation of the Employment Secretary and the social policy from 16 December 2011 amending regulation on the highest acceptable concentrations and intensities of factors harmful to the to health in the workplace (Journal of Laws of 2011 No. of 274 pos. 1621):

**Sulfamic acid (data for the concentrated substance):**

NDS, NDSCh: not specified

Recommendations concerning the procedure of the monitoring of dangerous contents of the constituents in air - methodology of measurements:

- Regulation of the Health Minister from 2 February 2011 on examinations and measurements of factors harmful to the to health in the workplace (D. U. 2011, No. 33, pos. 166 as amended)
- PN-89 / Z-01001 / 06 - Protection of the cleanness of air. Names, expressions and individuals. Terminology concerning the research on the quality of air on workstations.
- PN-89 / Z-04008 / 07 - Protection of the cleanness of air. Sampling. Principles of picking air samples up in the workplace and the interpretation of results.
- PN-EN- 689: 2002 - Air on workstations - Guidelines of the exposure assessment inhalation to agents through the comparison to permissible values and the strategy of measurements.

Attention : When the concentration of the substance is known, personal protection should be made taking into account the concentration of a substance present in your workplace, time of exposure and operations performed by the employee. In an emergency, if the concentration of substances in the workplace is not known, use personal protection of the highest class of protection

**8.2 Exposure controls.**

Used personal protection should comply with the Regulation of the Minister of Economy of 21 December 2005 on essential requirements for personal protective equipment (Journal of Laws No. 259, item. 2173):

**RESPIRATORY PROTECTION:** In case of insufficient ventilation, gravity and the formation of particulate dust mask is recommended

**HANDS PROTECTION:** Protective gloves resistant to chemicals.

**EYE PROTECTION:** Safety glasses.

**SKIN PROTECTION:** Protective clothing.

**SECTION 9. Physical and chemical properties**

9.1. Information on basic physical and chemical properties

**Appearance** – powder

**Odour** – odour-free  
**Odour threshold:** no data available  
pH – 1,2 (10 g/l water)  
**Melting point/freezing point::** 200-205°C  
**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:** 1,039 ± 0,020 g/cm<sup>3</sup>  
**SOLUBILITY:**  
a) WATER - 181 g / l (20 ° C), 470 g / l (80 ° C)  
b) ORGANIC SOLVENT - no  
N-octanol/water partition coefficient - no  
Auto-ignition temperature: they didn't mark  
**TEMPERATURE OF THE DISINTEGRATION:** 209 ° C  
**Viscosity:** no data available  
**Explosive properties:** no data available  
**Oxidizing properties:** no data available

**9.1. Other informations**

INDEX OF REFRACTION - no

\* - Presented as weight%. sucrose content in the aqueous solution

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

Reacts violently with chlorine, nitric acid, strong bases, hypochlorous acid, strong oxidizing agents, sulfidami, cyanates. The reaction with the rules may be exothermic

**10.2 Chemical stability**

Under normal storage chemically stable (see section 7).

**10.3 . Possibility of hazardous reactions**

In contact with metals it produces hydrogen. Reacts with cyanide with the release of hydrogen cyanide.

**10.4. Conditions to avoid**

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

**10.5 Incompatible materials**

Materials to be avoided: alkali metals, light metals, oxidizing agents, aliphatic amines, amides, ammonia, organic anhydrides

**10.6 Hazardous decomposition products**

Nitrogen oxides, sulphur dioxide

**SECTION 11. Toxicological information****EXPOSURE****-RESPIRATORY:** after exposure to dust irritation (cough, shortness of breath) may cause pulmonary edema, headaches and dizziness.**- INGESTION:** If ingested, causes irritation of the mucous membranes of the mouth, throat, esophagus and gastrointestinal tract, vomiting, diarrhea, drop in blood pressure, breathing problems.**- SKIN CONTACT:** irritating to skin**- EYE CONTACT:** irritating, causes pain and tearing, light sensitivity.**Information Concerning ingredients (according to Cards of Characteristics of Individual raw materials):****Sulfamic acid (given for the concentrated element):**

LD50 of 3160 mg/kg (rat, orally)

It's irritating to eyes and the skin.

**SECTION 12. Ecological information****Data Concerning raw materials (according to KCHNSCh):**

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Sulfamic acid (given for the concentrated element):  
LC50 70.3 mg/l/ of 96 h (fish)  
UE10 > 1000 mg/l/ of 16 h (bacteria)  
Do not Expect the bioaccumulation: Pow log: -4.34  
Not to commit the product for getting for canalization, of groundwaters and surface.  
Harmfully on account of the change a pH is acting.

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

Do not mix with other liquid wastes. Do not empty into drains. The product should be fully used in accordance with its recommendation, if this is not possible product or residues must be disposed of as special waste.

Waste code and type: 16 03 05 - organic wastes containing dangerous substances

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

**13.2. Methods of of waste disposal**

Contaminated packaging should be emptied. Empty container rinse with water several times and used it as preparation. Empty packaging returned to the manufacturer or refer to company specialized in recycling.

Comply with the provisions of the Act of 14 December 2012 on waste (OJ 2013, pos. 21, as amended)

Comply with the provisions of the Act of 13 June 2013 on the management of packaging and packaging waste (OJ 2013, pos. 888).

Waste code and type: 15 01 02 - plastic packaging

**SECTION 14. Transport information**

Trade name : GRAN KAM AGD

14.1. Number UN: 2967

14.2 UN proper shipping name. : sulfamic acid

14.3. Transport hazard class(es): 8, code of clasification C2

14.4. Packing group : III

14.5. Environmental hazards: YES

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

**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 25<sup>th</sup> February 2011 on chemical substances and chemical preparations (Journal of Law No 63, item 322).
- Ordinance of the Minister of Health from 28<sup>th</sup> 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 2<sup>nd</sup> 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 29<sup>th</sup> October 2004 changing the ordinance on criteria and classification of chemical substances and chemical preparations (Journal of Law No 243, item 2440).
- Directive (EC) no 648/2004 of European Parliament and Council from 31<sup>st</sup> 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

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detergents in order to adjustment of its attachments III and VII.

- Directive (EC) no 1907/2006 of European Parliament and Council from 18<sup>th</sup> 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.

- Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control).

### 15.2. Chemical safety assessment

No substance safety assessment is required for this product

## 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 and H phrases referred to under heading 3 of the Safety Data Sheets.

H315 - Causes skin irritation

H319 - Irritating to eyes

H412 - Harmful to aquatic life with long lasting effects

Xi - Irritant

R36/38 - Irritating to eyes and skin

R52/53 - Harmful to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

Detail principles of use the product are on Technical Data Sheet on [www.tenzi.eu](http://www.tenzi.eu)

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

Date of expiry in normal conditions – 12 months from the production date

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

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