

## GRAN KAM AGD

### Safety Data Sheet

#### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier:** GRAN KAM AGD
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Product designed for removing limescale from household appliances.
- 1.3 Details of the supplier of the safety data sheet:**
- TENZI Sp. z o.o.  
Skarbimierzyce 20  
72-002 Dołuje  
tel. +48 91 3119777  
fax. +48 91 3119779  
E-mail address for a competent person responsible for SDS: [technolog@tenzi.pl](mailto: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 Irrit. 2 H315** – Causes skin irritation.  
**Eye Irrit. 2 H319** – Causes serious eye irritation.  
**Aquatic Chronic 3 H412** – Harmful to aquatic life with long lasting effects.

- 2.2. Label elements:**  
(According to 1272/2008/EC\*)

Hazard symbols:



**Signal words:**  
WARNING

**Hazard statements:**

**H315** – Causes skin irritation.  
**H319** – Causes serious eye irritation.  
**H412** – Harmful to aquatic life with long lasting effects.

**Precautionary statements:**

**P280** – Wear protective gloves/protective clothing/eye protection/face protection.  
**P305+P351+P338** – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**P337+P313** – If eye irritation persists: Get medical advice/attention.

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#### 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. Mixtures:

Composition (according to: 648/2004/EC):

- > 80% inorganic acid

Identification	Hazardous ingredient/classification	Concentration
CAS: 5329-14-6 WE: 226-218-8 Index: 016-026-00-0 Registration: 01-2119488633-28-XXXX	<b>Amidosulfonic acid (99.5%)</b>  Skin Irrit. 2 H315, Eye Irrit. 2 H319, Aquatic Chronic 3 H412	> 80%

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

### SECTION 4. FIRST AID MEASURES

#### 4.1. Description of first aid measures:

##### Inhalation:

In case of inhalation poisoning symptoms (cough, dyspnea, dizziness) move the injured to fresh air. Get medical attention if symptoms persist.

##### Skin contact:

If product comes in contact with the skin, immediately remove all contaminated clothing and flush exposed area with large amounts of water. In case of skin changes or burns, get medical attention.

##### Eye contact:

Flush eyes with running water (at least 15 minutes) while keeping eyelids open. Get medical attention.

##### Ingestion:

DO NOT induce vomiting. Give lots of water to drink. DO NOT give any neutralizing agents. Immediately get medical attention and show this SDS or label.

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

##### Inhalation:

May cause cough, dyspnoea, pain and dizziness.

##### Skin:

Irritant.

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**Eyes:**

Irritant. Causes pain, lacrimation and photophobia.

**Ingestion:**

May cause irritation of the mucous membranes, mouth, throat, stomach and gastrointestinal system. May cause vomiting, diarrhea, lower blood pressure and dyspnoea.

Symptoms may appear up to 24 hours after ingestion.

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

Get medical attention.

Fresh water and eye-wash preparations must be available on the worksite.

### SECTION 5. FIREFIGHTING MEASURES

**5.1. Extinguishing media:****Suitable extinguishing media:**

Extinguishing foam resistant to alcohol, water, extinguishing powder, carbon dioxide.

**Unsuitable extinguishing media:**

There are not any known extinguishing media that shouldn't be used.

**5.2. Special hazards arising from the substance or mixture:**

Product is non-flammable. Under the influence of high temperature, product creates toxic gas, nitrogen oxides and sulfur dioxide.

**5.3. Advice for firefighters:**

Firefighters should wear self-contained breathing apparatus and full protective clothing. In case of fire, warn the people nearby and evacuate unprotected and untrained personnel from hazard area. Notify relevant emergency services. 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

### SECTION 6. ACCIDENTAL RELEASE MEASURES

**6.1. Personal precautions, protective equipment and emergency procedures:****For non-emergency personnel:**

Protective chemical-proof gloves (0.11 mm thick), safety glasses.

**For emergency responders:**

Protective clothes, protective chemical-proof gloves (0.11 mm thick), self-contained breathing apparatus, safety glasses. Avoid skin and eye contact. Provide proper ventilation.

**6.2. Environmental precautions:**

Avoid discharge into drains, watercourses or onto the ground at all costs.

**6.3. Methods and material for containment and cleaning up:**

In case of unexpected release of the substance into the environment, inform appropriate services about the emergency and remove any source of ignition. Prevent spills from entering sewers, surface water or groundwater. If it is possible, confine and contain the spill by closing the flow of the liquid, plug the damaged container and put it into leakproof wrapping. For a larger spill, make a dike around the outside edges of the spill and use absorbent materials (sand, sawdust, minced limestone).

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Store clean-up materials 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:

Be careful when working with this product.

Use personal protection recommended in section 8

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

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

Avoid risk – read this instruction sheet carefully before using the product.

After usage, keep container tightly closed and keep it away from unauthorized people.

Use only adequate ventilation to avoid inhalation poisoning.

#### 7.2. Conditions for safe storage, including any incompatibilities:

Store in a tightly closed, original plastic container. Store this product in a dry environment that will be maintained at 5°C - 35°C temperature with a good ventilation system and an easy washable, nonabsorbable alkaline resistant floor.

DO NOT expose the product to sunlight and 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.

#### NDS/NDSch/NDSP values for individual chemical substances (according to SDS or Chemical Safety Report):

##### Amidosulfonic acid (data for highly concentrated substance):

NDS, NDSch, NDSP: not identified.

#### DNEL/PNEC values for individual chemical substances (according to SDS or Chemical Safety Report):

##### Amidosulfonic acid (data for highly concentrated substance):

##### DNEL:

Group: workers, Exposure time: long-term, Exposure route: dermal, Type of effect: systemic effect,

Value: 10 mg/kg

Group: consumers, Exposure time: long-term, Exposure route: ingestion, Type of effect: systemic effect,

Value: 5 mg/kg

##### PNEC:

Aqua (fresh water): 0.048 mg/l

Aqua (marine water): 0.0048 mg/l

Sediment (fresh water): 0.173 mg/kg

Sediment (marine water): 0.0173 mg/kg

Sewage treatment plant: 2 mg/l

Soil: 0.00638 mg/kg

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

#### 8.2. Exposure controls:

**RESPIRATORY PROTECTION:**

Not needed.

**HAND PROTECTION:**

Protective gloves resistant to acidified chemical substances.  
0.11 mm thick.

**EYE/FACE PROTECTION:**

Safety glasses

**SKIN PROTECTION:**

Protective clothes.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1. Information on basic physical and chemical properties:

<b>Appearance:</b>	Powder
<b>Odour:</b>	None
<b>Odour threshold:</b>	No data available
<b>pH:</b>	1.2 (10 g/l of water)
<b>Melting point:</b>	200-205°C
<b>Freezing point:</b>	No data available
<b>Initial boiling point:</b>	No data available
<b>Boiling range:</b>	No data available
<b>Flash point:</b>	No data available
<b>Evaporation rate:</b>	No data available
<b>Flammability (solid, gas):</b>	No data available
<b>Upper flammability limit:</b>	No data available
<b>Lower flammability limit:</b>	No data available
<b>Upper explosive limit:</b>	No data available
<b>Lower explosive limit:</b>	No data available
<b>Vapour pressure:</b>	No data available
<b>Vapour density:</b>	No data available
<b>Relative density:</b>	in 25°C - 2126
<b>Solubility:</b>	
<b>A) Water:</b>	181 g/l (20°C), 470 g/l (80°C)
<b>B) Organic solvent:</b>	No data available
<b>Partition coefficient N-Octan:</b>	-4.34
<b>Partition coefficient Water:</b>	-4.34
<b>Auto-ignition temperature:</b>	No data available
<b>Decomposition temperature:</b>	209°C
<b>Viscosity:</b>	No data available
<b>Explosive properties:</b>	No data available
<b>Oxidising properties:</b>	No data available

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#### 9.2. Other information:

**Refractive index:** No data available Brix\*  $\pm$  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:

Reacts violently with chlorine, nitric acid, strong alkali, hypochlorous acid, strong oxidizers, sulphides and cyanates.  
Reaction with alkali may be exothermic.

#### 10.2 Chemical stability:

Stable under recommended storage conditions (see section 7).

#### 10.3 Possibility of hazardous reactions:

Contact with common metals produces easily flammable hydrogen.  
Contact with cyanide produces hydrogen cyanide.

#### 10.4 Conditions to avoid:

Avoid heavily warmed rooms without ventilation and long-term exposure to sunlight.

#### 10.5 Incompatible materials:

Materials to avoid: alkali, light metals, oxidizing agents, aliphatic amines, amides, ammonia, organic anhydrides.

#### 10.6 Hazardous decomposition products:

Phosphorus oxides, nitrogen oxides, sulphur dioxides.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects:

##### ACUTE TOXICITY:

**Inhalation:** causes cough and dyspnoea,. May cause pulmonary edema, pain and dizziness.

**Skin contact:** irritates skin.

**Eye contact:** irritates eyes, causes pain, lacrimation and photophobia.

**Digestive system:** may cause irritation of the mucous membranes, mouth, throat, stomach and gastrointestinal system.  
May cause vomiting, diarrhea, lower blood pressure and dyspnoea.

##### DETAILS OF PARTICULAR COMPONENTS (according to substance's SDS):

##### Amidosulfonic acid (data for highly concentrated substance):

**LD50:** 3160 mg/kg (rat, orally)

Severe eye irritation (rabbit) (OECD 405)

Severe skin irritation (rabbit) (OECD 405)

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#### SECTION 12. ECOLOGICAL INFORMATION

##### 12.1. Toxicity:

###### Data for the mixture ingredients:

###### Amidosulfonic acid (data for highly concentrated substance):

Product classified as harmful to aquatic organisms. It may cause long lasting disadvantages in the aquatic environment.

**LC50:** 70.3 mg/l/96h (fish, *P. promelas*)  
**UE10:** > 1000 mg/l/16h (bacteria, *Psudomonas putida*)

##### 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.

###### Data for the mixture ingredients:

###### Amidosulfonic acid (data for highly concentrated substance):

No data available.

##### 12.3. Bioaccumulative potential:

###### Amidosulfonic acid (data for highly concentrated substance):

No data available.

##### 12.4. Mobility in soil

###### Amidosulfonic acid (data for highly concentrated substance):

No data available.

##### 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 sewage system. Product should be totally used up according to its description.

If it's impossible to do so, 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 the container 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.

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#### SECTION 14. TRANSPORT INFORMATION

**TRADE NAME: GRAN KAM AGD**

- 14.1. **UN Number:** 2967  
14.2. **UN proper shipping name:** Sulphamic acid.  
14.3. **Transport hazard class(es):** ADR class. 8, code C2  
14.4. **Packing group:** III  
14.5. **Environmental hazards:** No  
14.6. **Special precautions for user:** For more details see Sections 6 and 8.  
14.7. **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** No data available.

#### WARNING LABELS



#### 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 following mixture substances:

**Amidosulfonic acid:** A Chemical Safety Assessment has been carried out.



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#### SECTION 16. OTHER INFORMATION

Information above is based on current knowledge of product in 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 symbols and H phrases from Section 2 and 3:**

- Aquatic Chronic 3** – Hazardous to the aquatic environment - Chronic Hazard, category 3.  
**Skin Irrit. 2** – Causes skin irritation, category 2.  
**Eye Irrit. 2** – Causes serious eye irritation, category 2.

- H315** – Causes skin irritation.  
**H319** – Causes serious eye irritation.  
**H412** – Harmful to aquatic life with long lasting effects.

More information on the product can be found on the specific technical data sheet which is available on [www.tenzi.pl](http://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 producent recommendations)

**Product has certificate of the National Hygiene Institute.**

**Changes compared to the previous version:**

- section 14 (environmental hazards)

Updated cards versions are now available on [www.tenzi.pl](http://www.tenzi.pl)

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