

Material Safety Data Sheet (MSDS)

Creation Date: 10.08.2000 Revision Date: 02.10.2015

Version: 1.0

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: GRAN STILL

- 1.2 Relevant identified uses of the substance or mixture and uses advised against: Product is intended for cleaning the surface of stainless steel in the food industry. Acidic preparation for descaling, remove grease and inorganic deposits.
- 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 IDENTYFICATION

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

Composition (according to: 648/2004/EC): <50% inorganic acids, <5% cationic and anionic surfactans, excipients not classified as dangerous

		CAS / EC	Index-No.	REACH	Classification
Product / ingredient name	Concentration [% weigh]			registrati on number	Regulation (EC) No. 1272/2008 [CLP]
Phosphoric acid	< 50	7664-38-2 231-633-2	015-011- 00-6	01- 21194859 24-24- XXXX	Skin Corr. 1B H314, Met. Corr. 1 H290,
Anionic surfactants	< 5	85536-14-7 287-494-3		01- 21194902 34-40- XXXX	Skin Corr. 1C H314, Acute Tox. 4 H302
Cationic surfactants	< 1,2	85408-49-7 287-011-6		01- 21194900 61-47- XXXX	Skin Irrit. 2 H315, Eye Dam 1 H318, Aquatic Acute 1 H400, Aquatic Chronic 2 H411, Acute Tox. H302

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. 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. Obtain medical attention if skin reaction occurs.

Eye contact– Immediately flush eyes with running water at least 15 minutes keeping eyelids open. Get medical attention **Ingestion**– If swallowed, DO NOT induce vomiting. Give lots of water to drink. DO NOT give any neutralizing agents. Immediately contact a doctor and show this MSDS or label.

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

Inhalation—long-term exposures or un-well ventilated area may cause: upper respiratory tract irritation.

Skin– causes severe skin burns.

Eyes- causes serious eye damage.

Ingestion— if swallowed, may cause irritation or burns of the mucous membrane.

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: Use extinguishing measures that are appropriate to local circumstances and surrounding environment.

Extinguishing media which shell 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. 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: self-contained breathing apparatus, protective clothes, chemical resistant gloves thickness of 0.11 mm, safety glasses/goggles.

For emergency responders: protective clothes, self-contained breathing apparatus, 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, onto the ground water or surface water. 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. 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 5°C - 35°C. 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):

Phosphoric Acid (data for high concentrations substance):

TLV-TWA: 1 mg/m³ TLV-STEL: 2 mg/m³

Anionic surfactants(data for high concentrations substance):

TLV-TWA, TLV-STEL - not identified

Cationic surfactants(data for high concentrations substance):

TLV-TWA,TLV-STEL - not identified.

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

Phosphoric Acid (data for high concentrations substance):

No data available

Anionic surfactants(data for high concentrations substance):

 $DNEL\ Exposure\ frequency:\ long\ term,\ Exposure\ route:\ dermal,\ Value:\ 170\ mg/kg\ bw/day\ ,\ Group:\ workers\ Type\ of\ effect:\ systemic\ effect$

DNEL Exposure frequency: long term, Exposure route: inhalation, Value: 12 mg/m3, Group: workers Type of effect: systemic effect



DNEL Exposure frequency: long term, Exposure route: inhalation, Value: 12 mg/m3, Group: workers Type of effect: local effect

DNEL Exposure frequency: long term, Exposure route: dermal, Value: 85mg/kg bw/day, Group: general population / consumers, Type of effect: systemic effect

DNEL Exposure frequency: long term, Exposure route: inhalation, Value: 3 mg/m3, Group: general population / consumers Type of effect: systemic effect

DNEL Exposure frequency: long term, Exposure route: oral, Value: 0,85 mg/kg bw/day, Group: general population, Type of effect: systemic effect

DNEL Exposure frequency: long term, Exposure route: inhalation, Value: 3 mg/m3, Group: general population Type of effect: local effect

PNEC Aqua (fresh water): 0,287 mg/l PNEC Aqua (marine water): 0,0287 mg/l

PNEC Aquatic (intermittent release): 0,0167 mg/l PNEC Sediment (freshwater): 0,287 mg/kg

PNEC Sediment (marine water): 0,287 mg/kg

PNEC Soil: 35 mg/kg

PNEC Sewage treatment plant: 3,43 mg/l

Cationic surfactant (data for high concentrations substance):

DNEL Exposure frequency: long term, Exposure route: dermal, Value: 5,5 mg/kg bw/day, Group: consumers, Type of effect: systemic effect

DNEL Exposure frequency: long term, Exposure route: inhalation, Value: 3,825 mg/m3, Group: consumers

DNEL Exposure frequency: long term, Exposure route: oral, Value: 0,44 mg/kg bw/day, Group: consumers, Type of effect: systemic effect

DNEL Exposure frequency: long term, Exposure route: dermal, Value: 11 mg/kg bw/day , Group: workers Type of effect: systemic effect

DNEL Exposure frequency: long term, Exposure route: inhalation, Value: 15,5 mg/m3, Group: workers Type of effect: systemic effect

PNEC Aqua (fresh water): 0,0335 mg/l Extrapolation method: Assessment factor.

PNEC Aqua (marine water): 0,0335 mg/l Extrapolation method: Assessment factor.

PNEC Sediment (freshwater): 5,24 mg/kg Extrapolation method: partition coefficient

PNEC Sediment (marine water): 0,524 mg/kg Extrapolation method: partition coefficient

PNEC Soil: 1,02 mg/kg Extrapolation method: partition coefficient

PNEC Sewage treatment plant: 24 mg/l Extrapolation method: Assessment factor.

PNEC secondary poisoning 11,1 mg/kg Extrapolation method: Assessment factor.

PNEC intermittent release: 0,00335 mg/l Extrapolation method: Assessment factor.

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: not be required

HAND PROTECTION: acid-resistant gloves for example: DERMATRIL 740, thickness of 0.11 mm.

EYE/FACE PROTECTION: safety glasses **SKIN PROTECTION:** protective clothes

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

APPEARANCE/FORM: brown liquid

ODOUR: characteristic for this fragrance composition

ODOUR THRESHOLD: not identified

 $pH - 1\pm 1$

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: 1,210÷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 -33% 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

No data available.

10.2 Chemical stability

Stable under recommended storage conditions (see point 7).

10.3 Possibility of hazardous reactions

Reacts with most metals to release hydrogen gas which can form explosive mixtures with air.

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 bases, preparations which contain chlorine, strong oxidizers.

10.6 Hazardous decomposition products

Phosphorus oxides, nitrogen oxides, carbon oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

ACUTE TOXICITY:

-INHALATION: long-term exposures or un-well ventilated area may cause upper respiratory tract irritation.

-DIGESTIVE SYSTEM: if swallowed, may cause irritation or burns of the mucous membrane.

-SKIN CONTACT: causes severe skin burns.

-EYE CONTACT: causes serious eye damage.

ATEmix = 22158 (Acute toxicity, oral)

$\label{lem:decomposition} \textbf{DETAILS OF PARTICULAR COMPONENTS (according to substances's MSDS):}$

Phosphoric acid (data for high concentrations substance):

LD50 (oral, rat): 1530 mg/kg LD 50 (rabbit, skin): 2740 mg/kg

Skin corrosion/irritation: extremely corrosive, destroys tissue, causes burns.

Serious eye damage/eye irritation: may cause irreversible eye damage.

Specific target organ toxicity (single exposure): causes burns of the upper respiratory tract.

Specific target organ toxicity (repeated exposure): cause inflammation of the skin, chronic inflammation of the upper respiratory tract.

Anionic surfactants(data for high concentrations substance):

LD50= 1470 mg/kg (rat, oral).

LD50= 2000 mg/kg (rat, skin).

Local effects:

-skin: slighty irritant

-eyes: Causes serious eye irritation

No sensitising effect known.



Germ cell mutagenicity: Ames test: no mutagenic potential

Carcinogenicity: no data available Reproductive toxicity: no data available

Cationic surfactant (data for high concentrations substance):

Details for active ingredient:

LD50> 2000 mg/kg (rat, skin)

LD50 1064 (rat, oral)

Not sensitising (guinea pig, OECD 406, human EPA CFR)

Potential chronic health effects:

- NOAEL, chronic exposure, 90 days, oral 88mg/kg (OECD 408)
- NOAEL, chronic exposure, skin 1%

LOEL, chronic exposure 90 days, skin 0,27% (OECD 411)

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

DETAILS OF PARTICULAR COMPONENTS:

Phosphoric acid (data for high concentrations substance):

-for fish: LC50 Gumbusia affinis: 138 mg/l/96h, LC 50 Lepomis macrochirus 3 - 3,25 mg/l/96h

-for Daphnia: EC50 Daphnia magna: >100 mg/l/48h.

Harmful to aquatic life. The hazardous effect depends on the pH of the aqueous solution.

Do not allow the substance penetrate into the sewage system, surface water, groundwater and soil.

Anionic surfactants(data for high concentrations substance):

-for fish: LC50 1-10 mg/l/96h

-for Daphnia: EC50 1-10 mg/l/48h

-for Aquatic plants: EC50 1-10 mg/l

Cationic surfactant (data for high concentrations substance):

EC5072h Algae 0.1428 mg/l

EC5018 h Static Bacteria > 24 mg/l

EC5048 h Static Daphnia 3.1 mg/l

LC5096 h Static Fish 2.67 to 3.46 mg/l

NOEC 28 days Flow-through Algae > 67 ugl

NOEC 21 days Flow-through Daphnia 0.7 mg/l

NOEC 302 days Flow-through Fish 0.42 mg/l

M factor acute = 1

2.2 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

DETAILS OF PARTICULAR COMPONENTS:

Phosphoric acid (data for high concentrations substance):

Inorganic substance, therefore biodegradation testing is not applicable.

Anionic surfactants (data for high concentrations substance):

Biodegradation > 60% after 28 days acc. OECD 301 B, ISO 9439, 92/69/EWG, part 4-C

The surfactants contained in this product comply with the biodegradability criteria as laid down inregulation 648/2004/EC on detergents.

Cationic surfactant (data for high concentrations substance):

OECD 301B Ready Biodegradability - CO₂ Evolution Test 28 days 90 %

OECD 62 days 74.9 to 76 %

OECD 303A Simulation Test - Aerobic Sewage Treatment - Activated Sludge Units 21 days 69.9 to 75 %

OECD 314D - Biodegradation in Treated Effluent-Surface water Mixing Zone Test; 14 days 43 to 63

12.3 Bioaccumulative potential:

Phosphoric acid (data for high concentrations substance):

Does not apply to inorganic substances.

Anionic surfactants(data for high concentrations substance):

No data available.

Cationic surfactant (data for high concentrations substance):

Log pow = <2.7 (low)

12.4 Mobility in soil

Phosphoric acid (data for high concentrations substance):

Phosphoric acid is not absorbed by the soil. In most cases it will dissociate to PO₄³⁻ and H⁺ ions in the soil pore water and/or react with minerals present in the soil, in particular calcium, iron and aluminium. Except in very specific circumstances



(acidic soils, certain mineral soil types, very high dosage of phosphoric acid) phosphoric acid will not therefore penetrate beyond the surface layer of soil.

Anionic surfactants (data for high concentrations substance):

No data available.

Cationic Surfactant (data for high concentrations 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 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 rise 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: GRAN STILL

14.1. UN Number: 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC I.N.O. (phosphoric acid)

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

14.4. Packing group: III

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 MARPOL73/78 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:

Phosphoric acid: A Chemical Safety Assessment has been carried out.

Anionic surfactants: A Chemical Safety Assessment has not been carried out.

Cationic surfactant: A Chemical Safety Assessment has 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 Irrit. 2 - Causes skin irritation, category 2

Eye Dam. 1 - Serious eye damage, category 1

Aquatic Chronic 3 - Harmful to aquatic organisms, category 3

Skin Corr. 1B - Skin corrosion, category 1B

Met.Corr 1- Substance/Mixture is corrosive to metals, category 1

Eye Irrit. 2 - Causes eye irritation, category 2

Aquatic Acute 1 - Hazardous to the aquatic environment, Acute category 1

Aquatic Chronic 2 - Hazardous to the aquatic environment, Chronic category 2 $\,$

Acute Tox. 4 - Acute toxicity, category 4

Skin Corr. 1C - Skin corrosion, category 1C

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.

H400 – Very toxic to aquatic life.

H411 – Toxic to aquatic life with long lasting effects.

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.

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)

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 9 nages	Changes in	the content b	v unauthorized	persons is prohibited.

Skarbimierzyce 02.10.2015