

**SANI PLUS forestus**

**Material Safety Data Sheet (MSDS)**

Creation Date 01.12.2006  
Revision Date: 08.10.2015  
Version: 1.0

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

- 1.1 Product identifier:** SANI PLUS forestus  
**1.2 Relevant identified uses of the substance or mixture and uses advised against:** This product is intended to eliminate odors.  
**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.pl](http://www.tenzi.pl), tel. +48 91 3119777, fax. +48 91 3119779 E-mail address for a competent person responsible for MSDS: [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**  
 Product is not a mixture of hazardous under applicable regulations.

**2.2. Label elements**

**According to 1272/2008/EC\***  
 Hazard symbols and signal words: no data available

**Hazard statements:**  
 No data available

**Precautionary statements**  
 No data available

**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):**  
 Alcohol, <5% cationic and nonionic surfactants, odor composition (Linalool, Limonene), excipients

Product / ingredient name	Concentration [% weigh]	CAS / EC	Index-No.	REACH registration number	Classification
					Regulation (EC) No. 1272/2008 [CLP]
Ethanol	<3	64-17-5 200-578-6	603-002-00-5	01-21195292	Flam Liq. 2 H225
Propan-2-ol /Isopropanol	<2	67-63-0 200-661-7	603-117-00-0	30-52-XXXX	Flam Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336
Cationic surfactants	< 0,3	68424-85-1 270-325-2	---	01-21199651 80-41-	Acute Tox.4 H302, Skin Corr. 1B H314, Aquatic Acute 1 H400, Aquatic Chronic 1 H410

XXXX

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.**Skin contact**– If product comes in contact with the skin flush exposed area with large amounts of water. Obtain medical attention.**Eye contact**- 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****Skin** – For people with skin allergy tendency may cause skin sensitisation**Eyes** – Contact with eyes may cause irritation.**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 shall not be used for safety reason:** unknown**5.2. Special hazards arising from the substance or mixture**

Product is non-flammable.

**5.3. Advice for firefighters**

Firefighters should wear full protective clothing and self-contained breathing apparatus. 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.

**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/ google

For emergency responders: protective clothes, chemical resistant gloves thickness of 0.11 mm, safety glasses/ google

**6.2. Environmental precautions**

No data available

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

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**

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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.

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<sup>o</sup>C - 30<sup>o</sup>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.

**DNEL /PNEC values for substances (according to MSDS or Chemical Safety Report):****Ethanol (data for high concentrations substance):**

DNEL Exposure frequency: long term, Exposure route: dermal, Value: 343 mg/kg, Group: workers

DNEL Exposure frequency: long term, Exposure route: inhalation, Value: 950 mg/m<sup>3</sup>, Group: workers

DNEL Exposure frequency: long term, Exposure route: dermal, Value: 206 mg/kg bw/day, Group: consumers

DNEL Exposure frequency: Long term, Exposure route: inhalation, Value: 114 mg/m<sup>3</sup>, Group: consumers

DNEL Exposure frequency: long term, Exposure route: oral, Value: 87 mg/kg/bw/day, Group: consumers

PNEC Aqua (fresh water) 0,96 mg/l

PNEC Aqua (marine water) 0,79 mg/l

PNEC Sediment (freshwater) 3,6 mg/kg

PNEC Soil 0,63 mg/kg

**Propan-2-ol /Isopropanol (data for high concentrations substance):**

DNEL Exposure frequency: long term, Exposure route: dermal, Value: 888 mg/kg, Group: workers

DNEL Exposure frequency: long term, Exposure route: inhalation, Value: 500 mg/m<sup>3</sup>, Group: workers

DNEL Exposure frequency: long term, Exposure route: dermal, Value: 319 mg/kg bw/day, Group: consumers

DNEL Exposure frequency: long term, Exposure route: inhalation, Value: 89 mg/m<sup>3</sup>, Group: consumers

DNEL Exposure frequency: long term, Exposure route: oral, Value: 29 mg/kg/bw/day, Group: consumers

PNEC Aqua (fresh water) 140,9 mg/l

PNEC Aqua (marine water) 140,9 mg/l

PNEC Sediment (freshwater) 552 mg/kg

PNEC Soil 28 mg/kg

**Cationic surfactants (data for high concentrations substance):**

- C12-C16 chloride, alkylbenzyltrimethylammonium:

DNEL Exposure frequency: long term, Exposure route: inhalation, Value: 3,96 mg/m<sup>3</sup>, Group: workers, Type of effect: systemic effect

PNEC Aqua (fresh water) 0,0009 mg/l

PNEC Aqua (marine water) 0,00009 mg/l

**8.2. Exposure controls****Personal protective equipment**

**RESPIRATORY PROTECTION:** not be required

**HAND PROTECTION:** not be required

**EYE/FACE PROTECTION:** not be required

**SKIN PROTECTION:** not be required

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

APPEARANCE/FORM: liquid

ODOUR: characteristic for this fragrance composition

ODOUR THRESHOLD: not identified

pH 7±1

MELTING/FREEZING POINT: not identified

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INITIAL BOILING POINT AND BOILING RANGE: not identified

FLASH POINT: 78 (\*)

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: 1,010±0,020 g/cm<sup>3</sup>

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 - 12 % 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)

(\*) - based on similar product

**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**

No data available

**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**

No data available

**10.6 Hazardous decomposition products**

No data available

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

- **INHALATION:** non-irritant for upper respiratory tract

- **DIGESTIVE SYSTEM:** if swallowed, may cause irritation of the mucous membrane

- **SKIN CONTACT:** for people with skin allergy tendency may cause skin sensitisation

- **EYE CONTACT:** contact with eyes may cause irritation.

ATEmix = 265957 (Acute toxicity, oral)

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

LD50: 6200 mg/kg

LC50: 95,6 mg/l/4h

**Propan-2-ol /Isopropanol (data for high concentrations substance):**

LD50> 2000 mg/kg (Acute toxicity, oral)

LD50> 2000 mg/kg (Acute toxicity, dermal)

LC50>5 mg/l

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Local effects:

-skin- non-irritant

-eyes- irritant

Not sensitising.

High vapor concentration may cause neurotic effects.

Germ cell mutagenicity: Ames test negative

Carcinogenicity: not carcinogenic effects

Reproductive toxicity: no adverse effects were observed

**Cationic surfactants (data for high concentrations substance):**

C12-C16 chloride, alkylbenzyltrimethylammonium:

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

Skin corrosion / irritation: causes serious burns.

Serious eye damage / irritation: causes serious burns.

Mutagenic effect on reproductive cells - chloride C12-C16 Alkylbenzyltrimethylammonium:

Genotoxic:

AMES test - negative

gene mutation assay in vitro - not mutagenic

In vitro cytogenetic test - does not cause structural chromosome aberration

**SECTION 12. ECOLOGICAL INFORMATION****12.1 Toxicity****DETAILS OF PARTICULAR COMPONENTS**

**Ethanol (data for high concentrations substance):**

- for Fish: LC50 = 8140 mg/l/48h.

- for Daphnia: EC50 9268 – 14221 mg/l/48h.

- for algae: EC50 5000 mg/l/7d.

**Propan-2-ol /Isopropanol (data for high concentrations substance):**

- for fish: LC50 > 100 mg/l/48h.

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

- for algae: EC50 > 100 mg/l/72h.

**Cationic surfactants (data for high concentrations substance):**

Eco toxicity - chloride C12-C16 Alkylbenzyltrimethylammonium - fish: LC50 0,1-1mg / l / 96h

- for Daphnia: EC50> 0,01-0,1mg / l / 48h

- for algae: IC50> 0.01-0.1 mg / l / 72h (Pseudokirchneriella subcapitata), NOEC> 0.001-0.01 mg / L (Pseudokirchneriella subcapitata)

M factor acute = 10

**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.

**Ethanol (data for high concentrations substance):**

Readily Biodegradable

**Propan-2-ol /Isopropanol (data for high concentrations substance):**

Biodegradability: >70% after 10 days

**Cationic surfactants (data for high concentrations substance):**

The product contains only readily biodegradable substances.

- C12-C16 chloride, alkylbenzyltrimethylammonium:

The product is readily biodegradable:> 60% BOD / 28d closed bottle test (OECD 301D)

**12.3 Bioaccumulative potential:**

**Ethanol (data for high concentrations substance):**

Bioaccumulative potential: logPow 0,05

**Propan-2-ol /Isopropanol (data for high concentrations substance):**

Bioaccumulative potential: logPow 0,05

**Cationic surfactants (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 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: SANI PLUS forestus

14.1. UN Number: [not applicable](#)

14.2. UN proper shipping name: [not applicable](#)

14.3. Transport hazard class(es): [not applicable](#)

14.4. Packing group: [not applicable](#)

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: [not applicable](#)

## 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:**

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**Ethanol:** A Chemical Safety Assessment has been carried out.  
**Propan-2-ol/Isopropanol:** A Chemical Safety Assessment has been carried out.  
**Cationic surfactants:** No data available

**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:

Flam liq. 2- Flammable liquid, category 2

Eye Irrit. 2- Causes eye irritation, category 2

STOT SE 3- Specific target organ toxicity - Single exposure STOT, Category 3.

Acute Tox. 4- Acute toxicity, category 4

Skin Corr. 1B- Corrosive to skin, category 1B

Aquatic Acute 1 - Hazardous to the aquatic environment - Acute Hazard, Category 1

Aquatic Chronic 1 - Hazardous to the aquatic environment - Chronic Hazard, Category 1

H225 – Highly flammable liquid and vapour.

H302 – Harmful if swallowed.

H314 – Causes severe skin burns and eye damage.

H319 – Causes serious eye irritation.

H336 – May cause drowsiness or dizziness.

H400 – Very toxic to aquatic life.

H410 – Very toxic 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 producer recommendations)

**Changes compared to the previous version:**

- section 6,8 - thickness of gloves. Updated cards versions are now available on [www.tenzi.pl](http://www.tenzi.pl)

This Material Safety Data Sheet contains 7 pages. Changes in the content by unauthorized persons is prohibited.

Skarbimierzyce 08.10.2015