

Material Safety Data Sheet (MSDS)Creation Date 10.08.2000
Revision Date: 13.10.2015
Version: 1.0**SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier: TopEFEKT® CITRO****1.2 Relevant identified uses of the substance or mixture and uses advised against:** Neutral product with a pleasant smell of washing and nourishing properties. Product is intended for cleaning floors, do not leave streaks. It maintains gloss and is quick-drying.**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 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.

Despite the ignition temperature in the range of 35-60 ° C, the product is not classified as flammable in Category 3 because of getting negative results in the sustained combustibility test (according to the Regulation of the European Parliament and Council Regulation (EC) No 1272/2008 - a record 2.6.4.5)

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):** alcohols, <5% anionic and non-ionic surfactants fragrance composition; excipients not classified as hazardous.

Product / ingredient name	Concentration [% weigh]	CAS / EC	Index-No.	REACH registration number	Classification
					Regulation (EC) No. 1272/2008 [CLP]
Ethanol	< 7	64-17-5 200-578-6	603-002-00-5	01-21195292	Flam Liq. 2 H225

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Propan-2-ol / Isopropanol	< 5	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
Anionic surfactants	< 0,5	85536-14-7 287-494-3	---	01- 21194902 34-40- XXXX	Skin Corr. 1C H314, Acute Tox. 4 H302
Non-ionic surfactants	< 0,5	68439-54-3 polymer	---	---	Eye Dam. 1 H318, Acute Tox. 4 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 victim to fresh air.

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 or burns occurs.

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

Inhalation – non-irritant for upper respiratory tract.

Skin – for people with skin allergy tendency may cause skin sensitisation.

Eyes – contact with eyes may cause irritation.

Ingestion – if swallowed, may cause irritation 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. Water mist, water jet or extinguishing powder.

Extinguishing media which shall not be used for safety reason: unknown.

5.2. Special hazards arising from the substance or mixture

Product is flammable.

5.3. Advice for firefighters

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

For emergency responders:

Personal protection: protective clothes, self-contained breathing apparatus, chemical resistant gloves thickness of 0.11 mm, safety glasses / goggles.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

In case of unintended release substance into environment inform on emergency and remove the source of ignition. 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 8.2.

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 in order to avoid inhalation poisoning.

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.

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/m³, 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/m³, 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/m³, 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/m³, 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

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

Non-ionic surfactants (data for high concentrations substance):

No data available.

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: 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: blue liquid

ODOUR: characteristic for this composition

ODOUR THRESHOLD: not identified

pH 7±1

MELTING/FREEZING POINT: not identified

INITIAL BOILING POINT AND BOILING RANGE: not identified

FLASH POINT: 48°C (*)

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: 0,971 ± 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 – 13,7% 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)

Ability of liquids to sustain combustion: this material will not sustain combustion.

(*)- based on similar product

SECTION 10. STABILITY AND REACTIVITY**10.1 Reactivity**

Mixture is flammable.

10.2 Chemical stability

Stable under recommended storage conditions (see point 7)

10.3 Possibility of hazardous reactions

Not applicable.

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

Materials to be avoided: do not occur.

10.6 Hazardous decomposition products

Carbon monoxide.

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: 76142 (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):

LD>50 2000 mg/kg (Acute toxicity, oral)

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

LC50>5 mg/l

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.

Specific target organ toxicity (single exposure): no data available.

Specific target organ toxicity (repeated exposure): no data available.

Aspiration hazard: no data available.

Anionic surfactants (data for high concentrations substance):

LD50 1470 mg/kg (rat, oral).

LD50 2000 mg/kg (rat, skin).

Skin corrosion/irritation: slightly irritant for skin

Serious eye damage/eye irritation: very irritant for eyes

Not sensitising.

Germ cell mutagenicity: Ames test negative.

Carcinogenicity: no data available.

Reproductive toxicity: no data available.

Non-ionic surfactants (data for high concentrations substance):

Harmful if swallowed. May cause serious, sometimes irreversible, eye damage.

Details for Alcohol ethoxylates c8-c18 (>5-20EO):

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

LD50> 2000 mg/kg (rat, dermal)

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.

Anionic surfactants(data for high concentrations substance):

- for fish :LC50 1-10 mg/l/ 96h
- for daphnia:EC50 1-10 mg/l/48h
- for algae: EC50 1-10 mg/l

Non-ionic surfactants (data for high concentrations substance):

- LC50 > 1-10 mg/l/96h (OECD 203) (Cyprinus carpio)
- EC50 > 1-10 mg/l/48h (OECD 202) (Daphnia magna)
- EC50 > 1-10 mg/l/72h (OECD 201) (Scenedesmus subspicatus)

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

Anionic surfactants (data for high concentrations substance):

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

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

Non-ionic surfactants (data for high concentrations substance):

Readily biodegradable.

Degree of elimination: >70% after 28 days, according to OECD 301A

Degree of elimination: >60% after 28 days, according to OECD 301B

12.3 Bioaccumulative potential:**Ethanol (data for high concentrations substance):**

logPow 0,05

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

logPow 0,05

Anionic surfactants (data for high concentrations substance):

No data available.

Non-ionic 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: TopEFEKT® CITRO

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

Ethanol: A Chemical Safety Assessment has been carried out.

Propan-2-ol /Isopropanol: A Chemical Safety Assessment has been carried out.

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

Non-ionic surfactants: A Chemical Safety Assessment has not 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

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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 due to the flammable characteristics were based on studies ignition temperature and ability of liquids to sustain combustion. The remaining classifications were made based on a calculation method and the concentrations of hazardous ingredients in the mixture.

The full list of phrases and H symbols from Section 2 and 3:

Flam Liq. 3 – Flammable liquid, category 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.

Skin Corr. 1 – Corrosive to skin, category 1

Acute Tox. 4 – Acute toxicity, category 4

Eye Dam. 1 – Serious eye damage, category 1

H225 – Highly flammable liquid and vapor.

H226 – Flammable liquid and vapour.

H302 – Harmful if swallowed.

H314 – Causes severe skin burns and eye damage.

H318 – Causes serious eye damage.

H336 – May cause drowsiness or dizziness.

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 producer recommendations)

Changes compared to the previous version:

-section 2,1 - change the classification of mixtures, section 9 - ability of liquids to sustain combustion. Updated cards versions are now available on www.tenzi.pl

This Material Safety Data Sheet contains 8 pages. Changes in the content by unauthorized persons is prohibited.

Skarbimierzyce 13.10.2015