

TOP KLIN

Material Safety Data Sheet (MSDS)

Creation Date 01.12.2006
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SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

1.1 Product Name: TOP KLIN

1.2 Recommended Use: Final product can be used as a cleaner for removing traces after pen, tracing paper, stamps etc.

1.3 Company:

TENZI Sp. z o.o., 72-002 Dołuje, Skarbimierzyce 18, e-mail: info@tenzi.pl, www.tenzi.pl, tel. +48 91 3119777, fax. +48 91 3119779

1.4 Emergency Phone Number: +48 91 31 19 777 (mon. - fri. 8am-4pm) or 112

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

This product is classified as hazardous in accordance to Ordinance of the Minister of Health from 10th August 2012 on criteria and classification of chemical substances and chemical preparations (Journal of Law No 0 item 1018).

R10 - Flammable.

R67 - Vapours may cause drowsiness and dizziness.

2.2. Label elements

R10 - Flammable.

R67 - Vapours may cause drowsiness and dizziness.

S46 - If swallowed, seek medical advice immediately and show this container or label.

S2 - Keep out of the reach of children

2.3. Other hazards

Keep only in the original container.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Composition (according to: 648/2004/WE): <5% anionic surfactants, alcohols, fragrance composition; excipients

Hazardous ingredients	Concentration [% weigh]	CAS Number	WE Number	Index Number	Classification	
					WE 1272/2008	1999/45/WE
Isopropyl alcohol	<20	67-63-0	200-661-7	603-117-00-0	Eye Irrit. 2 H319, Flam Liq. 2. H225, STOT SE 3 H336	F, Xi, R11, R36, R67
Anionic surfactants	<5	68891-38-3	500-234-8	---	Skin Irrit. 2 H315, Eye Dam 1 H318	Xi, R38, R41

The full texts of R-phrases and H-symbols are in 16th section

Registration nr REACH:

Isopropyl alcohol: 01-2119457558-25-XXXX

Anionic surfactants: 01-2119488639-16-XXXX

SECTION 4. FIRST AID MEASURES

TOP KLIN**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, physical activity may cause pulmonary oedema. Keep warm and rested. Get medical attention
Skin– If product comes in contact with the skin remove all contaminated clothing and flush exposed area with large amounts of water. Obtain medical attention if skin reaction occurs.

Eyes – Immediately flush eyes with running water at least 15 minutes. Get medical attention if irritation persists.

Ingestion – DO NOT induce vomiting. If the exposed subject is fully conscious, give plenty of water to drink. DO NOT give any neutralizing agents. In case of symptoms, contact a doctor and show this MSDS or label.

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

Inhalation – Vapours may cause drowsiness and dizziness.

Skin – Causes skin irritation. May cause an allergic skin reaction.

Eyes - May cause eyes irritation

Ingestion – If swallowed, may cause oral mucositis

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**

Extinguishing media: use extinguishing measures that are appropriate to local circumstances and surrounding environment: water spray/fog, carbon dioxide, dry chemical or foam.

Extinguishing media which shall not be used for safety reason: DO NOT use a solid water stream.

5.2. Special exposure hazards

Product highly flammable! Fire may produce toxic thermal decomposition product (carbon monoxide).

5.3. Advice for firefighters

Firefighters should wear full protective clothing including 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**

Personal protection: protective clothing, self-contained breathing apparatus, gloves, safety glasses

Avoid skin and eyes contact. Provide proper ventilation.

6.2. Environmental precautions

no data available

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, use absorbent materials (sand solid, sawdust, fines limestone). Clean-up materials 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 extremely 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.

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Avoid risk – read this instruction sheet carefully before using.
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 (HDPE container). Store this product in dry environment that will be maintained at temperature between 5°C - 30°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

Regulation of Minister of Labor and Social Policy of 16th December 2011 amending regulation in case of the most acceptable concentration and intensity of the harmful agents for health in work surrounding (Journal of Laws, 2011 No 274 item 1621).

Isopropyl alcohol (data for high concentrations substance):

NDS: 900 mg/m³

NDSCh: 1200 mg/m³

Anionic surfactants (data for high concentrations substance):

NDS, NDSCh: - no data available

Recommendations to the procedure of monitoring hazardous substances in air – method of measurements:

- Ordinance of the Minister of Health from 2nd February 2011 on test and measurements of the factors harmful for work environment (Journal of Law 2011, No 33, item 166)
- PN-89/Z-01001/06 – Air protection against pollution- names, definitions and units. Terminology concerning test of air pollution around workplaces.
- PN-89/Z-04008/07 – Air protection against pollution. Samples. The principles of getting samples of air around workplace and result analysis.
- PN-EN-689:2002 – Air around workplace- Guidelines of assessment of inhalation exposure on chemical substances by comparison to acceptable concentration rates and measurement strategy.

NOTE: When the concentration of substance is known, personal protection should be chosen including this concentration around workplace, time of exposure and operations performed by worker. In emergency, if the concentration around workplace is unknown, personal protection of high protection class must be used.

8.2. Personal protective equipment

Personal protection clothing and equipment should be in accordance to Ordinance of the Minister of Economy from 21st December 2005 on essential requirements of personal protection measures (Journal of Law No. 259, item 2173):

RESPIRATORY PROTECTION: not required

HAND PROTECTION: not required

EYE/FACE PROTECTION: not required

SKIN PROTECTION: not 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 - no data available

pH – 7 ± 1

MELTING/FREEZING POINT: no data available

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 (UEL/LEL): no data available

VAPOUR PRESSURE: no data available

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VAPOUR DENSITY: no data available
RELATIVE DENSITY: $0,950 \pm 0,020 \text{ g/cm}^3$
SOLUBILITY:
a) WATER – completely soluble
b) ORGANIC SOLVENT – no data available
PARTITION COEFFICIENT N-OCTANOL/WATER: – no data available
AUTO-IGNITION TEMPERATURE: no data available
DECOMPOSITION TEMPERATURE: no data available
VISCOSITY no data available
EXPLOSIVE PROPERTIES: no data available
OXIDISING PROPERTIES: no data available

9.2. Other information

REFRACTIVE INDEX – 28,3% 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 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 moisture and heat. Avoid long-term expose to sunlight

10.5 Incompatible materials

Oxidizing agents

10.6 Hazardous decomposition products

Carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION**ACUTE TOXICITY:**

- **INHALATION:** Vapours may cause drowsiness and dizziness.
- **DIGESTIVE SYSTEM:** If swallowed, may cause mucous membranes irritation.
- **SKIN CONTACT:** may cause skin irritation.
- **EYE CONTACT:** cause eye irritation

DETAILS OF PARTICULAR COMPONENTS**Isopropyl alcohol (data for high concentrations substance):**

LD50 > 2000 mg/kg (oral)

LD50 > 2000 mg/kg (skin)

LC50 > 5 mg/l (inhalation)

Irritant effects:

- eyes: may cause eye irritation
- skin: non irritant

Product does not cause skin allergy.

Chronic Effects on Humans: Prolonged and repeated contact may cause nausea and dizziness.

Anionic surfactant (data for high concentrations substance):

LD50 > 2000 mg/kg (rat, oral)

LD50 > 2000 mg/kg (rat, skin)

SECTION 12. ECOLOGICAL INFORMATION

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The surface-active agents contained in preparation comply with the biodegradability criteria pursuant to Ordinance EC 648/2004 on detergents.

Ecotoxicity (in acc.MSDS):**Isopropyl alcohol (data for high concentrations substance):**

Ecotoxicity:

- for fish: LC50 > 100 mg/l/48h (Leuciscus idus melanotus)
- for daphnia: EC50 > 100 mg/l/48h (Daphnia magna)
- for algae: EC50 > 100 mg/l/72h (Scendesmus subspicatus).

Anionic surfactants (data for high concentrations substance):

Data is for ethoxylated alcohols.

Product is easily biodegradable.

LC50 1-10 mg/l/

EC50 > 1-10 mg/l/48h (crustaceans)

EC50 > 10-100 mg/l/72h (algae)

EC10 > 10000 mg/l (bacteria)

SECTION 13. DISPOSAL CONSIDERATIONS**RESIDUES AND WASTES**

DO NOT mix with other liquid wastes. DO NOT empty into drains. Dispose of this material and its container at hazardous or special waste collection point.

Codes to describe the type of hazardous waste: 07 06 04 – other organic solvents, washing liquids and mother liquors pursuant to the regulation of The Minister of Environment of 27 September 2001 "on the catalog of waste "(OJ 2001 No. 112, item 1206)

13.1. WASTE TREATMENT METHODS

Contaminated containers should be completely emptied. Empty container can be stored in containers for collection of plastic packaging, or can be delivered to specialized company for recycling.

Comply with the regulations from Act from 14th December 2013 on wastes (Journal of Law No 2013, item 21) with further amendments.

Comply with the regulations from Act from 11th May 2001 on packaging and packaging waste (Journal of Law No 63, item 638) with further amendments.

Codes to describe the type of hazardous waste: 15 01 02 – Plastic packaging

SECTION 14. TRANSPORT INFORMATION

Trade name: Top Klin

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: For more details see Section 13

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)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

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- 2) 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)
- 3) REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents
- 4) 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
- 5) 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
- 6) 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)
- 7) 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
- 8) REGULATION (EC) No 273/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 February 2004 on drug precursors

15.2. Chemical safety assessment

not evaluated

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.

The product classification was made based on the maximum concentration of hazardous substances.

The full list of Risk (R) phrases and H symbols from Section 3:

H225 – Highly flammable liquid and vapour

H315 – Causes skin irritation.

H318 – Causes serious eye damage.

H319 – Causes serious eye irritation.

H336 – May cause drowsiness or dizziness.

F – Highly flammable

Xi – Irritant

R11 – Highly flammable

R36 – Irritating to eyes.

R38 – Irritating to skin.

R41 – Risk of serious damage to eyes.

R67 – Vapours may cause drowsiness and dizziness.

For more details on this topic see 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.

TOP KLIN was submitted to Inspector for Chemical Substances.

Expiry date: 36 months from the production date (if product is stored according to the producer recommendations)

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Changes compared to the previous version:

+ general update - Updated cards versions are now available on www.tenzi.pl

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

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