

SAFETY DATA SHEET

[In accordance with the criteria of Regulation No 1907/2006 (REACH) and 453/2010]

Section 1: Identification of the substance/mixture and of the company

1.1. Product identifier.

Product name: **Eliquid: Fresón 0 mg/ml; Tizón 0 mg/ml; Legendary 0 mg/ml.**

A solution of Pharmaceutical Propylene Glycol (30%) with Pharmaceutical Vegetable Glycerine (70%) and flavour. No containing liquid nicotine (0mg/ml, 0,0%)

1.2. Significant identified application of substances or mixture and dissuaded application.

Relevant identified uses: production of mixtures (liquid component, e-liquids for electronic cigarettes).

Uses advised against: not determined

1.3. Data of the supplier of the safety data sheet.

Supplier: CHEMNOVATIC Sp. z o.o. Sp. k.

Address: Dobrzańskiego 3/BS002, 20-262 Lublin, Poland

Phone: +48 814754442

E-mail address of the person responsible for the information card: office@chemnovatic.com

1.4. Emergency telephone number.

112 (general emergency phone number)

Section 2: Hazards Identification

2.1. Classification of the substance or mixture.

Classification according to Regulation (EC) No. 1272/2008 of 16 December 2008 on classification, labeling and packaging (CLP)

General Hazard:

- The product is not classified as hazardous under current legislation.
- Health Hazards: Not applicable
- Hazardous properties: not applicable
- Environmental hazard: not applicable

2.2. Signage

- Pictograms determining the type of hazards: not applicable
- Warning: not applicable
- Phrases indicating type of hazard: H000 - product not classified as posing a hazard pursuant to valid regulations.
- Phrases determining conditions of safe use: not applicable

2.3. Other hazards

The product does not meet the criteria for PBT or vPvB in accordance with the criteria in Annex XIII of Regulation 1907/2006.

Section 3: Composition/Information on ingredients

3.1 Substances

Not applicable

3.2 Mixture

Composition:

Identification	(EC) 1272/2008	67/548/EEC	Note
CAS: 57-55-6 EC: 200-338-0 PROPYLENE GLYCOL	-	-	-
CAS: 56-81-5 EC: 200-289-5 PHARMACEUTICAL VEGETABLE GLYCERINE	-	-	-
FLAVOURING	-	-	-

Information ingredients:

[1] Substance for which maximum workplace exposure limits are available
Full text of H - phrases in section 16.

Section 4: First aid measures

4.1. Description of first aid measures.

Inhalation: In the event of inhalation exposure, take the sufferer outdoors. Obtain medical advice.

Skin contact: In the case of skin contact, rinse profusely with water.

Eye contact: In case of contact with eyes, rinse with plenty of water. Remove contact lenses. After 1-2 min continue washing within the next few minutes. If irritation persists seek medical advice.

Consumption: Medical aid is not necessary. Never give fluids, nor cause vomiting, if the patient is unconscious or has convulsions.

4.2. Most important acute and delayed symptoms and effects of exposure.

No additional symptoms or effects are expected.

4.3. Indications concerning any immediate medical aid and special handling of the casualty.

No special antidote. Supporting treatment, based on assessment made by a doctor on the basis of the patient's response.

Section 5: Firefighting measures

5.1. Extinguishing media.

Extinguishing agents: fire extinguishing powders, foams resistant to alcohol, carbon dioxide, water mist. Do not use water in a full stream.

5.2. Specific hazards associated with substance or mixture.

Under the influence of a high temperature (fire), flammable vapours are developed, that form explosive mixtures with air. Incomplete combustion products may contain carbon monoxide and dioxide. As a result of fire the container may burst and cause a gas leak. Direct addition of water to hot liquid may result in rapid generation of steam or even its eruption.

5.3. Information for the fire brigade.

Containers exposed to fire or high temperatures are to be cooled down by spraying water from a safe distance. Use protective measures of the respiratory system and full protective clothes.

Section 6: Procedure in the case of unintended release to the environment

6.1. Personal precautions, protective equipment and emergency procedures.

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Use personal protective equipment. Avoid direct contact with the released substance. When wet, it may make pavement slippery.

6.2. Safety precautions with regard to environmental protection.

Prevent entry into waterway, sewers, watercourses.

6.3. Methods and materials preventing the spread of contamination and used for removal of contamination.

Stop the leakage, if possible. Cover spillages with non-flammable absorptive material, collect to a lockable container, rinse the contaminated surface with water.

6.4. References to other sections.

Information on relevant personal protection equipment are specified in section 8. Information on waste treatment are specified in section 13.

Section 7: Handling of substances and mixtures and storage

7.1. Precautions for safe handling.

In narrow spaces, provide an adequate ventilation.

7.2. Conditions of safe storage, together with the information related to any mutual inconsistencies.

Keep in tight packages (of stainless steel or aluminium) in a dry place, in temperature of 10-25°C, protecting against moisture (hygroscopic product) and sun rays (uV).

7.3. Specific final application.

No data available

Section 8: Exposure control/personal protection equipment

8.1. Parameters concerning control.

Glycol:

DNEL value for employees under the conditions of long-term exposure by inhalation (system effect): 50 mg/m³

DNEL value for employees under the conditions of long-term exposure by inhalation (local effect): 10 mg/m³

DNEL value for consumers under the conditions of long-term exposure by inhalation (system effect): 168 mg/m³

DNEL value for consumers under the conditions of long-term exposure by inhalation (local effect): 10 mg/m³

PNEC value for the environment of fresh waters: 260 mg/l PNEC value for the environment of marine waters: 26 mg/l

PNEC value (temporary release): 183 mg/l PNEC value (sewage treatment plant): 20000 mg/l

PNEC value for the environment of sediment (fresh waters): 572 mg/kg

PNEC value for the environment of sediment (marine waters): 57,2 mg/kg

PNEC value for the environment of soil: 50 mg/kg

Maximum acceptable concentrations:

- TWA: 10 mg/m³
- NSD, NSDCh - not marked

(According to the Ministry of Labour of 29 November 2002, Journal of Laws No. 217, item. 1833, with later amendments)

Recommendations for procedures of monitoring the content of hazardous components in the air - methodology of measurements:

- Regulation of the Minister Health of 20 February 2005 on tests and measurements of harmful factors for health in the work environment (Journal Of Laws no. 73 item 645)

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- PN-89/Z-01001/06. Air purity protection. Names, phrases and units. Terminology concerning tests of air quality on working posts.
- PN Z-04008-7:2002. Air purity protection. Sampling. Principles of sampling air in the working environment and interpretation of results.
- PN-EN-689: 2002. Air at workplace - guidelines of assessment of inhalation exposure to chemical factors by comparison with acceptable ones and measuring strategy.

Note: When the concentration of substance is determined and known, personal protection equipment should be selected, taking account of the concentration of substances present at a given working post, exposure time and activities performed by the employee. In case of emergency, if the concentration of substances at the work post is unknown, use personal protection equipment with the highest recommended protection class.

The employer is obliged to ensure that any personal protection equipment used, as well as working clothes and footwear have protective and utility properties and provide their appropriate laundering, maintenance, repair and disinfection.

The recommended initial and periodic examination of workers should be carried out in accordance with the Regulation of the Minister of Health and Social Welfare of 30 May 1996 on medical examinations of workers, the scope of preventive health care workers and medical certificates issued for the purposes provided in the Labour Code (Journal of Laws no. 69/1996item 332, with amendments Journal of Laws No. 37/2001item 451)

Glycerine:

Maximum acceptable concentrations:

- glycerol (aerosols) - NSD 10 mg/m³

(According to the Ministry of Labour of 29 November 2002, Journal of Laws No. 217, item. 1833, with later amendments).

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8.2. Exposure controls.

Used personal protective equipment should comply with the Regulation of the Minister of Economy of 21 December 2005 on essential requirements for personal protective equipment (Journal of Laws No. 259, item 2173).

Protection of the respiratory system: not required under normal conditions, in the case of formation of a mist/aerosol, use a mask with an organic vapour absorber

Eye Protection: safety goggles / sealed safety glasses according to EN 166

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Protection of hands: not required. Avoid contact with skin

Technical protective measures: local exhaust ventilation

Other protection equipment: working clothes

General recommendations: Comply with good personal hygiene.

Do not consume, nor store food at the workplace. Before smoking tobacco or eating, wash hands.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties.

Smell:	characteristic
Smell threshold:	not applicable
pH:	6-8 (50% solution)
Melting/freezing point, [°C]:	<-20
Initial boiling point and range of boiling points, [°C]:	184-188
Flash point, [°C]:	104
Evaporation rate:	0,01
Flammability (of solid body, gas):	not applicable
Upper explosiveness limit, [% V/V]:	17,4
Lower explosiveness limit, [% V/V]:	2,4
Vapour Pressure at 20 °C [hPa]:	20
Relative density relative to air:	2,62
Density, [g/cm ³] at temp.25 °C:	1,135 - 1,140
Solubility in water:	total
Solubility in other solvents:	soluble in ethanol, acetone, chloroform
N-octanol/water breakdown factor:	-1,07
Autoignition temperature, [°C]:	>290
Temperature of decomposition, [°C]:	no data available
Viscosity [mPa s] at temp. 20°C:	671,7
Explosive properties:	it is not an explosive substance
Oxidising properties:	no data available
Physical state:	liquid

9.2. Other information.

The minimum ignition energy: [mJ]

Electrical conductivity: [pS/m]

Section 10: Stability and reactivity

10.1. Reactivity.

Hazardous reactions under conditions of normal use are not known.

10.2. Chemical stability.

Stable product under normal conditions. Hygroscopic.

10.3. Possibility of hazardous reactions.

Not present.

10.4. Circumstances to be avoided.

The product may decompose at increased temperature. Generation of gases during decomposition may cause pressure in closed systems. Avoid direct impact of sun rays and ultraviolet radiation sources.

10.5. Incompatible materials.

Strong oxidants, strong alkali, high temperature.

10.6. Hazardous decomposition products.

Dangerous products of decomposition depend on temperature, air access and presence of other materials. Decomposition products may contain, among others, aldehydes, alcohols, ethers, organic acids.

Section 11: Toxicological information

Glycol:

Acute toxicity - alimentary tract: LD50 > 20000 mg/kg (rat). It is believed that oral toxicity of a single dose is extremely low. No hazard is expected after consumption of small amounts, which happens during normal manipulation operations.

Acute toxicity - after application on skin: LD50 > 2000 mg/kg (rabbit). Absorption through the skin, in one-time, long-term exposure, of harmful amounts of this material, is not possible

Acute toxicity - respiratory tract: Based on physical properties it probably does not cause hazard when inhaled.

Acute toxicity - inhalation: 317.042 mg/l/2h (rabbit) at room temperature concentration of vapours is very low due to physical properties. Mists may cause irritation of the upper respiratory tract (nose and throat). At this concentration, no cases of death were recorded.

Caustic/irritating effect on the skin: Long-term contact is generally not irritating for the skin. Repeated exposure may cause the skin to flake and soften.

Serious damage to eyes/ irritating effect on eyes: It may cause very weak, temporary irritation to eyes. Damage to the cornea is improbable. Mists may cause irritation to the eyes

Allergenic effect on the respiratory tract or skin: in the tests it did not induce allergic reactions of skin.

Mutagenic effect on reproductive cells: In vitro mutagenicity studies were negative. Tests of genetic toxicity on animals rendered negative results.

Carcinogenicity: it did not cause occurrence of malignant tumours in laboratory animals.

Reproductive toxicity: in tests on animals it did not show an effect on reproduction capacity. In tests on animals it did not affect fertility.

Development toxicity: No cases of defects in newborns or other harmful effects on the foetus in laboratory animals were observed.

Substance toxic for organs or systems - One-time exposure: no data available

Substance toxic for organs or systems - Repeated exposure: in rare cases, repeated exposure to propylene glycol may cause effects related to the impact on the central nervous system.

Hazard caused by aspiration: no data available

Glycerine:

Acute toxicity - orally: LD50 12600 mg/kg (rat)

Acute toxicity - skin: LD50 > 10000 mg/kg (rat, OECD 402))

Acute toxicity - inhalation: LC50 > 570 mg/m³/1h (rat)

Caustic/irritating effect:

- eyes: does not cause irritation
- skin: does not cause irritation

Sensitisation:

- skin: no data available

- inhalation: no data available

Mutagenic effect: no data available

Carcinogenic effect: no data available

Harmful impact on reproduction capacity: no data available

Toxic effect on target organs - one-time exposure: no data available

Toxic effect on target organs - repeatable exposure: no data available

Hazard caused by aspiration: no data available

Section 12: Ecological Information

12.1. Toxicity.

Glycol:

Toxicity to fish: LC50: 40613 mg/l/96h (Oncorhynchus mykiss)

Toxicity to aquatic invertebrates: LC50: 18340 mg/l/48h (Ceriodaphnia dubia), LC50: 18800 mg/l/96h (Mysidopsis bahia)

Toxicity to algae: ErC50: 19000 mg/l/96h, (Selenastrum capricornutum) inhibiting the growth rate, ErC50: 19100 mg/l/96h, (Skeletonema costatum) inhibiting the growth rate

Toxicity to microorganisms: NOEC > 20,000 mg/l/18h (Pseudomonas putida)

Value of chronic toxicity for water invertebrates: NOEC: 13020 mg/l/7d (Ceriodaphnia), static regeneration, reproduction

Glycerine:

Toxicity to fish: LC50 > 10000mg / l (Leuciscus idus); LC50 > 5000mg/l/96h

Toxicity to daphnia: EC50 > 10000mg/l/24g (Daphnia magna)

Toxicity to algae: EC0 > 10000mg/l/7d (Scenedesmus quadricauda); LC0 2900 mg / l (Mocrocystis aeruginosa)

Toxicity to bacteria: EC50 > 10000mg/l/16h (Pseudomonas putida)

12.2. Durability and capacity of decomposition.

Glycol:

81% after 28 days, OECD 301F test

96% after 64 days, OECD 301F test

Biodegradation may proceed slowly in anaerobic conditions

Glycerine:

Biodegradation: > 60% after 28 days, closed bottle test.

BZT5 0,87 gO₂/g

ChZT 1,16 gO₂/g

12.3. Ability to bioaccumulate.

Glycol:

Possibility of bioconcentration is low (BCF < 100 or log Pow < 3) breakdown factor, n-octanol/water (log Pow): - 1.07 method EU A.8 Bioconcentration factor: 0,09.

Glycerine:

LogPow breakdown factor: -2.66 -bioaccumulation should not be expected.

12.4. Mobility in the soil.

Glycol:

Considering its very small Henry constant, it is not expected that volatilization from natural water reservoirs or moist soil is an important natural process.

Potential for mobility in the soil is very high (Poc between 0 and 50).

Condition of breakdown, organic carbon from soil/water (Koc): <1

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Henry's Law Constant (H): 1.2 E-0, 8 atm * m³/mole

Glycerine:

No data available

12.5. Results of assessment of properties PBT and vPvB.

The product does not meet the criteria for PBT or vPvB in accordance with the criteria in Annex XIII of Regulation 1907/2006

12.6. Other harmful effects of the action.

This mixture is not included in Appendix I to the Regulation (EC) 2037/2000 on substances that deplete the ozone layer

Section 13: Manner of waste disposal

13.1. Waste treatment methods.

Comply with the provisions of the Act of 14 December 2012 on waste (Journal of Laws 2013 pos. 21), with amendments

Comply with the provisions of the Act of 13 June 2013 on the management of packaging and packaging waste (Journal of Laws of 2013, item 888)

Regulation of the Minister of Environment of 27 September 2001 on the catalogue of waste (Journal of Laws no. 112/2001, item 1206)

Waste code: 07 01 99 Other unmentioned waste

Destroy by incineration in devices specially prepared for this purpose complying with waste disposal regulations.

Destroy by incineration in accordance with the valid regulations with regard to waste disposal.

Section 14: Transport Information

14.1. Road/Rail transport (ADR/RID).

UN number: not applicable

Correct transport name: not applicable

Transport hazard class: not subject to

Packaging group: without limitations

Hazard distinctive identification number: not applicable

Warning label: not applicable

Sign: Not applicable

Code of limitations of transportation through tunnels: not applicable

Other Information: not applicable

14.2. Sea transport (IMDG).

Not subject to

14.3. Transport by air (ICAO).

Not subject to

14.4. Transport by Inland Waterways (ADN).

Not subject to

14.5. Environmental hazards.

The substance is a threat to environment in accordance with criteria contained in the UN model regulations.

14.6. Special precautions for user

No data available

Section 15: Regulatory Information.

15.1. Legal regulations related to safety, health and environmental protection principles specific for the substance i mixture.

Act of 25 February 2011 on chemical substances and mixtures (Journal of Laws No. 63 of 2011.item 322)
Regulation of the Minister of Environment of 27 September 2001 on the catalogue of waste (Journal of Laws no. 112/2001, item 1206). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 on REACH. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008.on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, on classification, labelling and packing of substances and mixtures, changing and repealing Directive 67/548/EWG and 1999/45/WE and amending Regulation (EC) No. 1907/2006 -European Union Official Journal of 31.12.2008).

15.2. Assessment of chemical safety.

The manufacturer made a Chemical Safety Assessment.

Section 16: Other Information.

The above information is prepared on the basis of current state of knowledge and relates to the product in the form in which it is used. Data relating to the product are presented in order to include safety requirements, and not to guarantee their particular properties.

In the event when conditions of application of the product are beyond control of the manufacturer, responsibility for safe use of the product is borne by the user.

The Employer is obligated to inform all employees who have contact with the product, about hazards and personal protection equipment specified in this material safety data sheet.

This material safety data sheet has been prepared on the basis of MSDS provided by the manufacturer and/or web databases and the binding regulations regarding hazardous substances and chemical agents.

The product is not classified as hazardous. EXPOSURE SCENARIOS are not required.

List of H and EUH phrases: -

Trainings: Persons participating in trade of product should be trained with regard to proceedings, safety and hygiene.