

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

- 1.1
 Product information

 Commercial Product Name:
 Solution FT4 (EliGene® FFPE Tissue DNA Isolation Kit, 415050)
- **1.2** Relevant identified uses of the substance or mixture and uses advised against Use of the Substance/Mixture: Laboratory chemicals

1.3 Details of the supplier of the safety data sheet

Company: ELISABETH PHARMACON, spol. s r.o. Rokycanova 4437/5, 615 00 Brno, Czech Republic

| Telephone: | +420 542 213 851 |
|------------|-------------------|
| Fax: | +420 542 213 827 |
| E-mail: | info@elisabeth.cz |

1.4 Emergency telephone number

Centre for detoxification Prague: +420 224 91 92 93/ +420 224 91 54 02

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

The substance or mixture is classified as dangerous according to Regulation (EC) No 1272/2008.

Flam. Liq. 2; H225 Skin Irrit. 2; H315 Eye Irrit. 2; H319

2.2 Label elements

Hazard pictograms:



Signal Word: Hazard Statements: DangerH225Highly flammable liquid and vapor.H315Causes skin irritationH319Causes serious eye irritation.

Advice on safe handling

- P210 Keep away from heat/sparks/open flames/hot surfaces.
 - No smoking.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

Hazardous components

| Chemical Name | CAS- No. EC-No. Registration Number | Classification (REGULATION (EC) No 1272/2008) | Concentration (%) |
|---------------|--|---|-------------------|
| ethanol | 64-17-5 200-578-6 | Flam. Liq. 2; H225 Skin Irrit. 2; H315 Eye Irrit. 2; H319 | >= 50 -< 70 |

For explanation of abbreviations see section 16

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures General advice: Move out of dangerous area Show this data sheet to the doctor in attendance. If inhaled: If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician. In case of skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician. In case of eye contact: Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If swallowed: If accidentally swallowed obtain immediate medical attention. Rinse mouth with water. Never give anything by mouth to an unconscious person. 4.2 Most important symptoms and effects, both acute and delayed Symptoms: Causes serious eye irritation. 4.3 Indication of any immediate medical attention and special treatment needed Treatment: No information available. **SECTION 5: FIRE-FIGHTING MEASURES** 5.1 Extinguishing media Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting: Do not allow run-off from fire fighting to enter drains or water courses.



| E | Exposure to decomposition products may be a hazard to health. |
|--|---|
| Hazardous combustion products: N | No hazardous combustion products are known |
| 5.3 Advice for firefighters Special protective equipment for firefig | ghters: Wear self-contained breathing apparatus for firefighting if necessary. |
| Further information: | In the event of fire and/or explosion do not breathe fumes. Use a water spray to cool fully closed containers. |

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

| Personal precautions | Use personal protective equipment. |
|----------------------|--|
| | Ensure adequate ventilation. |
| | Remove all sources of ignition. |
| | Evacuate personnel to safe areas. |
| | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| | Beware of vapors accumulating to form explosive |
| | concentrations. Vapors can accumulate in low areas |
| | |

6.2 Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up:

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

| Advice on safe handling: | Avoid formation of aerosol. Do not breathe vapors/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. |
|------------------------------|--|
| Advice on protection against | Take necessary action to avoid static electricity discharge (which |



| fire | and explosion: | might cause ignition of organic vapours). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition |
|------|--|---|
| Hyg | iene measures: | Keep away from food and drink. Wash hands before breaks and at the end of workday. Ensure adequate ventilation, especially in confined areas. Avoid contact with the skin and the eyes. When using do not eat, drink or smoke. |
| Req | itions for safe storage, including a uirements for storage as and containers: | i ny incompatibilities Keep container tightly closed in a dry and well – ventilated place. |
| Adv | vice on common storage: | Do not store together with oxidizing and self -igniting products |
| Oth | er data: | No decomposition if stored and applied as directed. |
| • | i fic end use(s) cific use(s): | Laboratory chemicals |

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

| Chemical Name | CAS-No. | Value | Control parameters | Basis |
|---------------|---------|-------|--------------------|---------|
| ethanol | 64-17-5 | TWA | 1,000 ppm | GB EH40 |
| | | | 1,920 mg/m3 | |

8.2 Exposure controls

| Personal protective equipment | |
|-------------------------------|---|
| Eye protection: | Safety glasses Wear face - shield and protective suit for abnormal processing problems. Ensure that eyewash stations and safety showers are close to the workstation location. |
| Hand protection Remarks: | The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Protective gloves complying with EN 374. |
| Skin and body protection: | Choose body protection according to the amount and concentration of the dangerous substance at the work place. Footwear protecting against chemicals. Workers should wear antistatic footwear. |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| Appearance: | liquid |
|-------------|------------|
| Colour: | colourless |



| Odour: | alcohol-like |
|--|---------------------|
| Odour Threshold: | No data available |
| pH: | No data available |
| Melting point/range: | No data available |
| Boiling point/boiling range: | No data available |
| Flash point: | No data available |
| Evaporation rate: | No data available |
| Burning rate: | flammable |
| Upper explosion limit: | No data available |
| Lower explosion limit: | No data available |
| Vapour pressure: | No data available |
| Relative vapour density: | No data available |
| Relative density: | No data available |
| Density: | No data available |
| Solubility(ies) | |
| Water solubility: | soluble |
| Solubility in other solvents: | No data available |
| Partition coefficient: n-octanol/water | : No data available |
| Auto-ignition temperature: | No data available |
| Thermal decomposition: | No data available |
| Viscosity: | No data available |
| Explosive properties: | No data available |
| Oxidizing properties: | No data available |

9.2 Other information

No data available

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions:

Stable under recommended storage conditions. Hazardous decomposition products formed under fire conditions. Vapors may form explosive mixture with air. Keep away from oxidizing agents, and acidic or alkaline products none under normal use



Hazardous decomposition products: No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid:

Heat, flames and sparks.

10.5 Incompatible materials Materials to avoid:

No data available

10.6 Hazardous decomposition products

Hazardous decomposition products: No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Toxicological information for the product

| ata available |
|---------------|
| ata available |
| ata available |
| |

| Ingredients: | |
|----------------------------|-------------------------|
| Acute oral toxicity: | LD50/rat = 10,470 mg/kg |
| Acute inhalation toxicity: | LC50/rat = 20000 ppm |
| | Exposure time: 10 hours |

Skin corrosion/irritation Not classified based on available information Product: Remarks: May irritate skin.

Serious eye damage/eye irritation Causes serious eye irritation Product May cause irreversibke eye damage. Ingredients Ethanol: eye irritation

Respiratory or skin sensitisation Skin sensitisation: No data available Respiratory sensitisation: No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

Reproductive toxicity No data available

STOT - single exposure



No data available

Aspiration toxicity No data available

Further information Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

| Toxicity to fish: | No data available |
|-----------------------|-------------------|
| Toxicity to algae: | No data available |
| Toxicity to bacteria: | No data available |

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Bioaccumulation: Partition coefficient: n -octanol/water: No data available

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Additional ecological information Remarks: Harmful for water organisms.

SECTION 13. DISPOSAL CONSIDERATIONS

| 13.1 Waste treatment methods | |
|------------------------------|---|
| Waste from residues: | Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national regulations. |
| Contaminated packaging: | Dispose of as unused product. Do not re-use empty containers. |



| SECTION 14. TRANSPORT INFORMA | TION | |
|---|-------|--|
| 14.1 UN number 1170 | | |
| 14.2 UN proper shipping name Ethanol solution 14.3 Transport hazard class(es) | | |
| 3 | | |
| 14.4 Packing group | | |
| Packing group: | П | |
| Classification Code: | F1 | |
| Hazard Identification Number: | 33 | |
| Labels: | 3 | |
| Tunnel restriction code: | (D/E) | |
| 14.5 Environmental hazards Not regulated as a dangerous good | | |

14.6 Special precautions for user

For personal protection see section 8.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals: Not applicable

REACH -Candidate List of Substances of Very High Concern for Authorisation (Article 59): Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer: Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants: Not applicable

Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances:

| 7b | highly flammable | Quantity 1 5,000 t | Quantity 2 50,000 t | | |
|---|--|-----------------------|------------------------|--|--|
| Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances: | | | | | |
| P5c | FLAMMABLE LIQUIDS | 5,000 t | 50,000 t | | |
| 34 | Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils | 2,500 t t | 25,000 t | | |



(including diesel fuels, home heating oils and gas oil blending streams)

15.2 Chemical Safety Assessment

No data available

SECTION 16. OTHER INFORMATION

Full text of H-Statements

H225:Highly flammable liquid and vapour.H315:Causes skin irritation.H319:Causes serious eye irritation.Full text of other abbreviationsEye Irrit.:Eye irritationFlam. Liq.:Flammable liquids

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.