SECTION 1: Identification of the substance/mixture and of the company/undertaking

· 1.1 Product identifier

· Trade name: <u>ESPLINE TP</u> · Article number: 219126

· 1.2 Relevant identified uses of the substance or mixture and uses advised against

Not to be used for any purpose other than those mentioned below.

- · Application of the substance / the preparation: Laboratory use. For product use see insert.
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Fujirebio INC.

2-1-1 Nishishinjuku, Shinjuku-ku, Tokyo 163-0410, Japan

Tel: +81-3-6279-0899 Fax: +81-3-6279-0299

E-mail: fri-info@miraca.com

· Further information obtainable from:

European Representative: Fujirebio Europe N.V. Tel: +32-9-329.13.29 Fax: +32-9-329.19.11 E-mail: hse@fujirebio.com

· 1.4 Emergency telephone number:

FUJIREBIO INC. (Japan) Global Sales Department

Tel: +81-3-6279-0899

Mon - Fri 9:00am to 5:30pm (JST)

FUJIREBIO EUROPE

Technologiepark 6, 9052 Gent, Belgium

Tel: +32-9-329-13-29 Mon - Fri 9:00am to 5:30pm

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

The product is not classified, according to the CLP regulation.

· Additional information:

The amount of nitrocellulose in one test is negligible, causing no flammable or explosive hazard. Tests have been performed conform the UN Recommendations on the Transport of Dangerous Goods and the EC/1272/2008 classification criteria.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 void
- · Hazard pictograms void
- · Signal word void
- · Hazard statements void
- · Additional information:

Safety data sheet available on request.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description:

Solid (Nitrocellulose Membrane with Polyester Backing) and liquid mixture (Developing Solution).

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Trade name: ESPLINE TP

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· Dangerous components:

CAS: 103-47-9 2-(a)

2-(cyclohexylamino)ethanesulphonic acid

EINECS: 203-115-6

Eye Irrit. 2, H319

≤ 2.5%

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eve contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: Do not induce vomiting; call for medical help immediately.
- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray.

Use fire extinguishing methods suitable to surrounding conditions.

- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

See section 8 (Measurements for the control of exposure / personal protection).

- · 6.2 Environmental precautions: No special measures required.
- · 6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

- · 7.1 Precautions for safe handling No special precautions are necessary if used correctly.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store in a dry and well-ventilated area in the closed original packaging.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Respect the expiry date and the additional instruction given in the package insert.

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· 7.3 Specific end use(s) Laboratory use.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- · Respiratory protection: Not necessary if room is well-ventilated.
- · Protection of hands:

Wear protective gloves in order to be protected against chemical risks according to EN 420 and EN 374-1.

- · Material of gloves: Gloves made of latex, nitrile or PVC may be used.
- · Penetration time of glove material:

As the product is a preparation consisting of different substances, no specific information can be given about breakthrough times.

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:

Wear safety glasses in order to protect your eyes against chemical splashes according to EN 166.

· Body protection:

Wear a laboratory coat for your protection against chemical splashes according to EN 340 and EN 369.

· Limitation and supervision of exposure into the environment

Comply with the current local and national environmental regulations.

SECTION 9: Physical and chemical properties
. Q 1 Information on basic physical and chemical properties

· 9.1 Information on	basic physical d	and chemical	l properties
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· General Information

· Appearance:

Form: Solid (Nitrocellulose Membrane with Polyester Backing) and

liquid (Developing Solution)

Colour: Light yellow

Odour: Odourless

Odour threshold: Not determined.

• **pH-value:** 9.7-9.9

· Change in condition

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: Undetermined.

· Flash point: Not applicable.

· Flammability (solid, gas): Product is not flammable.

• Decomposition temperature: Not determined.

· Auto-ignition temperature: Not determined.

• Explosive properties: Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined.

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		(Contd. of page
Upper:	Not determined.	
· Vapour pressure:	Not determined.	
· Density:	Not determined.	
· Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
water:	Soluble.	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solids content:	0.1 %	
· 9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

- $\cdot \textbf{10.1 Reactivity} \ \textit{No further relevant information available}.$
- · 10.2 Chemical stability No further relevant information available.
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: Production of explosive azides in contact with lead, copper and zinc.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · LD/LC50 values relevant for classification: No data available for this product.
- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No data available for this product.
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.

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- · Additional ecological information:
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Dispose of contents in accordance with local / regional/ national/ international regulations.

- · Uncleaned packaging:
- Recommendation: Dispose of container in accordance with local/regional/national/international regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport informat	tion
· 14.1 UN-Number · ADR, ADN, IMDG, IATA	UN3270
· 14.2 UN proper shipping name · ADR · IMDG, IATA	3270 NITROCELLULOSE MEMBRANE FILTER NITROCELLULOSE MEMBRANE FILTER
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA	
· Class	4.1 Flammable solids, self-reactive substances and soli desensitised explosives.
· Label	4.1
· 14.4 Packing group · ADR, IMDG, IATA	II
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Flammable solids, self-reactive substances an solid desensitised explosives.
· EMS Number:	F-A,S-I
· Stowage Category	D
· 14.7 Transport in bulk according to Anno Marpol and the IBC Code	ex II of Not applicable.
· Transport/Additional information:	
· <i>ADR</i>	
· Limited quantities (LQ)	1 kg
Transport category	2
· Tunnel restriction code	E
· Remarks:	- 3.5.1.4 Excepted quantities of Dangerous goods that ar assigned code E2 are not subject to the Regulations when

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· UN "Model Regulation":	UN 3270 NITROCELLULOSE MEMBRANE FILTER, 4. II
· IATA · Remarks:	- Chapter 2.6 Excepted Quantities Art. 2.6.10 De Minim Quantities: Dangerous goods that are assigned code I are not subject to the Regulations when carried as cars provided that the maximum net quantity of material p inner packaging is limited to 1g for solids. - Special Provision A122: Nitrocellulose membrane filte covered by this entry, each with a mass not exceeding 0.5 are not subject to these Regulations when contains individually in an article or a sealed packet.
· IMDG · Remarks:	- 3.5.1.4 Excepted quantities of Dangerous goods that a assigned code E2 are not subject to the Regulations who carried as cargo provided that the maximum net quantity material per inner packaging is limited to 1g for solids Special Provision 286: Nitrocellulose membrane filte covered by this entry, each with a mass not exceeding 0.5 are not subject to these Regulations when contained individually in an article or a sealed packet.
	carried as cargo provided that the maximum net quantity material per inner packaging is limited to 1g for solids Special Provision 286: Nitrocellulose membrane filte covered by this entry, each with a mass not exceeding 0.5 are not subject to these Regulations when contained individually in an article or a sealed packet.

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · National regulations:
- · Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

The data indicated in these documents is provided in good faith and according to the current state of our knowledge. We will accept no liability for the consequences if the product is used for applications different to that intended. It is the responsibility of the consumer to ensure that all regulations concerning protection of human beings and environment are complied with during the handling, storage and use of the products.

· Relevant phrases

H319 Causes serious eye irritation.

· Classification according to Regulation (EC) No 1272/2008

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

* Data compared to the previous version altered.

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