SAFETY DATA SHEET

according to WHS Regulations (Hazardous Chemicals)

TregFlowEx Kit

Date of creation	20th November 2023		
Date of revision		Version	1

PRODUCT IDENTIFICATION	
Cat. No.	**Product name**
ED7417	TregFlowEx Kit

COMPONENTS OF THE KIT

Code	Name	Classification
ED7417-1	Fix and Lysing Solution	
ED7417-2	Permeabilizing Solution	Not classified as hazardous.
ED7417-3 ED7417-4 ED7417-5	Blocking Buffer CD4 FITC/CD25 PE FOXP3 APC	Not classified as hazardous.

SAFETY DATA SHEET

according to WHS Regulations (Hazardous Chemicals)

Fix and Lysing Solution

Creation date	20th November 2023		
Revision date		Version	1

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

1.1. Product identifier — Fix and Lysing Solution

Substance / mixture — mixture

Number — ED7417-1

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

Mixture's intended use

Diagnostic reagent

Mixture uses advised against

The product should not be used in ways other then those referred in Section 1.

1.3. Details of the supplier of the safety data sheet

Supplier/Local address

Name or trade name	Sysmex Australia Pty Ltd
Address	Suite 3, Level 5 15 Talavera Rd Macquarie Park NSW 2113
Phone	+61 2 9016 3040

Manufacturer

Name or trade name	EXBIO Praha, a.s.
Address	Nad Safinou II / 341, Vestec, 25250 Czech Republic
Phone	+420261090666
E-mail	orders@exbio.cz
Web address	www.exbio.cz

Competent person responsible for the safety data sheet

Name	EXBIO Praha, a.s.
E-mail	orders@exbio.cz

1.4. Emergency telephone number

For medical advice (English): 13 11 26 (Poisons Information Centre)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture is classified as dangerous.

Acute Tox. 4, H302+H312+H332
Skin Irrit. 2, H315
Skin Sens. 1, H317
Eye Irrit. 2, H319
STOT SE 3, H335
Muta. 2, H341
Carc. 1B, H350
STOT SE 2, H371
STOT RE 2, H373 (kidneys) (ingestion)

Full text of all classifications and hazard statements is given in the section 16.

Most serious adverse effects on human health and the environment

May cause damage to the kidneys through prolonged or repeated exposure if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. May cause cancer. Suspected of causing genetic defects. May cause damage to organs. Harmful if swallowed, in contact with skin or if inhaled.

2.2. Label elements

Hazard pictogram

Signal word

Danger

Hazardous substances

2,2'-oxybisethanol
formaldehyde
methanol

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H371	May cause damage to organs.
H373	May cause damage to the kidneys through prolonged or repeated exposure if swallowed.
H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.

Precautionary statements

P201	Obtain special instructions before use.
P260	Do not breathe vapours.
P264	Wash hands and exposed parts of the body thoroughly after handling.
P280	Wear protective gloves/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 603-140-00-6 CAS: 111-46-6 EC: 203-872-2 Registration number: 01-2119457857-21-XXXX	2,2'-oxybisethanol	20-30	Acute Tox. 4, H302 STOT RE 2, H373 (kidneys) (ingestion)	3
Index: 605-001-00-5 CAS: 50-00-0 EC: 200-001-8	formaldehyde	<13	Acute Tox. 3, H301+H311+H331 Skin Corr. 1B, H314 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1B, H350 Specific concentration limit: Skin Corr. 1B, H314: C ≥ 25 % Skin Irrit. 2, H315: 5 % ≤ C < 25 % Skin Sens. 1, H317: C ≥ 0,2 % Eye Irrit. 2, H319: 5 % ≤ C < 25 % STOT SE 3, H335: C ≥ 5 %	1, 2
Index: 603-001-00-X CAS: 67-56-1 EC: 200-659-6	methanol	<4	Flam. Liq. 2, H225 Acute Tox. 3, H301+H311+H331 STOT SE 1, H370 Specific concentration limit: STOT SE 1, H370: C ≥ 10 % STOT SE 2, H371: 3 % ≤ C < 10 %	3

Notes

1 Note B: Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid … %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

2 Note D: Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3 of Annex VI to Regulation (EC) No 1272/2008. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier who places such a substance on the market must state on the label the name of the substance followed by the words "non-stabilised".

3 Substance with workplace exposure limit.

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

If swallowed

Provide medical treatment. For persons with no symptoms, call the Toxicological Information Centre to decide about the need of medical treatment; provide information about the substances or composition of the product from the original packaging or the Safety Data Sheet of the product.

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

If inhaled

Cough, headache. May cause respiratory irritation.

If on skin

May cause an allergic skin reaction.

If in eyes

Causes serious eye irritation.

If swallowed

Irritation, nausea.

4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale mist/vapours/spray. Prevent contact with skin and eyes.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Do not inhale mist/vapours/spray. Prevent contact with skin and eyes. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not eat, drink or smoke when using this product. Wash hands and exposed parts of the body thoroughly after handling. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Store locked up. Keep container tightly closed.

7.3. Specific end use(s)

Diagnostic reagent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

Substance name (component)	Type	Value	Notes
methanol (CAS: 67-56-1)	TWA	200 ppm	Sk.
	TWA	262 mg/m^3	
	STEL	250 ppm	
	STEL	328 mg/m^3	
formaldehyde (CAS: 50-00-0)	TWA	1 ppm	Carc. 2; Sen.
	TWA	1.2 mg/m^3	
	STEL	2 ppm	
	STEL	2.5 mg/m^3	
2,2'-oxybisethanol (CAS:	TWA	23 ppm	
	TWA	100 mg/m^3	
	STEL	-	
	STEL	-	

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles.

Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

Respiratory protection

Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	characteristic, sweet / pungent
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	64,7 - 245 °C
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	data not available
Kinematic viscosity	data not available
Solubility in water	soluble
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	data not available
Relative vapour density	data not available
Particle characteristics	data not available

9.2. Other information

not available

SECTION 10: Stability and reactivity

10.1. Reactivity

not available

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture.

Acute toxicity

May cause damage to organs. Harmful if swallowed, in contact with skin or if inhaled.

2,2'-oxybisethanol

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Skin	LD_{50}	11890 mg/kg		Rabbit	

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/irritation
Causes serious eye irritation.

Respiratory or skin sensitisation
May cause an allergic skin reaction.

Germ cell mutagenicity
Suspected of causing genetic defects.

Carcinogenicity
May cause cancer.

Reproductive toxicity
Based on available data the classification criteria are not met.

Toxicity for specific target organ - single exposure
May cause respiratory irritation. May cause damage to organs.

Toxicity for specific target organ - repeated exposure
May cause damage to the kidneys through prolonged or repeated exposure if swallowed.

Aspiration hazard
Based on available data the classification criteria are not met.

11.2. Information on other hazards
The mixture does not contain substances with endocrine disrupting properties.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity
2,2'-oxybisethanol

Parameter	Value	Exposure time	Species	Environment
LC_{50}	75.2 mg/kg	96 hour	Fishes (Pimephales promelas)	

12.2. Persistence and degradability
not available

12.3. Bioaccumulative potential
Not available.

12.4. Mobility in soil
Not available.

12.5. Results of PBT and vPvB assessment
Not available.

12.6. Endocrine disrupting properties
None of the ingredients are listed.

12.7. Other adverse effects
Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

SECTION 14: Transport information

14.1. UN number or ID number
not subject to transport regulations

14.2. UN proper shipping name
not relevant

14.3. Transport hazard class(es)
not relevant

14.4. Packing group
not relevant

14.5. Environmental hazards
not relevant

14.6. Special precautions for user
Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments
not relevant

SECTION 15: Regulatory information

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

Classifications	Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).
Inventory listings	AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals) - All components are listed on AIIC, or are exempt. Australia Hazardous Chemical Information System (HCIS) Australian Inventory of Chemical Substances (AICS) - All ingredients are listed or exempt from listing

15.2. Chemical safety assessment
not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H370	Causes damage to organs.
H371	May cause damage to organs.
H373	May cause damage to the kidneys through prolonged or repeated exposure if swallowed.
H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled.
H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.

Guidelines for safe handling used in the safety data sheet

P201	Obtain special instructions before use.
P260	Do not breathe vapours.
P264	Wash hands and exposed parts of the body thoroughly after handling.
P280	Wear protective gloves/eye protection/face protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.

P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
ES	Identification code for each substance listed in EINECS
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC_{50}	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD_{50}	Lethal dose of a substance in which it can be expected death of 50% of the population
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution from Ships
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
SWA (Australia)	Safe Work Australia
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Carc.	Carcinogenicity
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
Muta.	Germ cell mutagenicity
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization

STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

Australian Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals, July 2020

The changes (which information has been added, deleted or modified)

The first edition of the GHS (rev.7) version of the safety data sheet

More information

Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.

SAFETY DATA SHEET

according to WHS Regulations (Hazardous Chemicals)

Permeabilizing Solution

Creation date	20th November 2023		
Revision date		Version	1

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

1.1. Product identifier — Permeabilizing Solution

Substance / mixture — mixture

Number — ED7417-2

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

Mixture's intended use

diagnostic reagent

Mixture uses advised against

The product should not be used in ways other then those referred in Section 1.

1.3. Details of the supplier of the safety data sheet

Supplier/Local address

Name or trade name	Sysmex Australia Pty Ltd
Address	Suite 3, Level 5 15 Talavera Rd Macquarie Park NSW 2113
Phone	+61 2 9016 3040

Manufacturer

Name or trade name	EXBIO Praha, a.s.
Address	Nad Safinou II / 341, Vestec, 25250 Czech Republic
Phone	+420261090666
E-mail	orders@exbio.cz
Web address	www.exbio.cz

Competent person responsible for the safety data sheet

Name	EXBIO Praha, a.s.
E-mail	orders@exbio.cz

1.4. Emergency telephone number

For medical advice (English): **13 11 26** (Poisons Information Centre)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture is not classified as dangerous according to the WHS Regulations.

Full text of all classifications and hazard statements is given in the section 16.

2.2. Label elements

none

2.3. Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to GHS
CAS: 8047-15-2	saponin	<1	Eye Irrit. 2, H319 STOT SE 3, H335
CAS: 151-21-3 EC: 205-788-1	Sodium dodecyl sulphate	<0.5	Flam. Sol. 2, H228 Acute Tox. 4, H302+H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Chronic 3, H412 Specific concentration limit:

			Eye Irrit. 2, H319: 10 % ≤ C < 20 % Eye Dam. 1, H318: C ≥ 20 %
Index: 011-004-00-7 CAS: 26628-22-8 EC: 247-852-1	sodium azide	<0.099	Acute Tox. 2, H300+H330 Acute Tox. 1, H310 STOT RE 2, H373 (ingestion) Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) AUH032

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air.

If on skin

Remove contaminated clothes.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person.

If swallowed

Rinse out the mouth with clean water. In the event of issues, find medical help.

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

If inhaled

Possible irritation of airways, cough, headache.

If on skin

Not expected.

If in eyes

Possible irritation.

If swallowed

Nausea, stomach pain, vomiting, diarrhoea.

4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with chemical resistant gloves. Use a self-contained breathing apparatus and full-body protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Follow the instructions in the Sections 7 and 8.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section

13.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well-ventilated areas designated for this purpose.

7.3. Specific end use(s)

diagnostic reagent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

SWA (Australia)

Substance name (component)	Type	Value
sodium azide (CAS: 26628-22-8)	TWA (ppm)	0.11 Peak limitation
	TWA (mg/m^3)	0.3 Peak limitation

8.2. Exposure controls

Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest. Maintain air concentration below occupational exposure standards, using engineering controls if necessary

Eye/face protection

Protective goggles.

Skin protection

Hand protection: Protective gloves resistant to the product.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	without fragrance
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	100 °C
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	data not available
Kinematic viscosity	data not available
Solubility in water	soluble
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	
Density	data not available
Relative vapour density	data not available
Particle characteristics	data not available

9.2. Other information

not available

SECTION 10: Stability and reactivity

10.1. Reactivity

The mixture is not reactive under normal conditions of use and storage. Sodium azide can react with metals contained in sewage to form lead or copper azide, which can explode on impact. When reacting with acids, sodium azide can release highly toxic hydrogen azide acid / hydrogen azide gas.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Sodium azide can react with metals contained in sewage to form lead or copper azide, which can explode on impact.

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

sodium azide

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD_{50}	27 mg/kg		Rat (Rattus norvegicus)	
Dermal	LD_{50}	20 mg/kg		Rabbit	
Inhalation	LC_{50}	0.054 mg/l	4 hour	Rat (Rattus norvegicus)	

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.

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.

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

Aspiration hazard

Based on available data the classification criteria are not met.

11.2. Information on other hazards

The mixture does not contain substances with endocrine disrupting properties.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

sodium azide

Parameter	Value	Exposure time	Species	Environment
EC_{50}	5.6 mg/l	48 hour	Aquatic invertebrates	

12.2. Persistence and degradability

not available

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Not available.

12.6. Endocrine disrupting properties

None of the ingredients are listed.

12.7. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

SECTION 14: Transport information

14.1. UN number or ID number

not subject to transport regulations

14.2. UN proper shipping name

not relevant

14.3. Transport hazard class(es)

not relevant

14.4. Packing group

not relevant

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information

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

Classifications	Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).
Inventory listings	AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals) - All components are listed on AIIC, or are exempt.
	Australia Hazardous Chemical Information System (HCIS)
	Australian Inventory of Chemical Substances (AICS) - All ingredients are listed or exempt from listing.

15.2. Chemical safety assessment

not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H228	Flammable solid.
H310	Fatal in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H300+H330	Fatal if swallowed or if inhaled.
H302+H332	Harmful if swallowed or if inhaled.

A list of additional standard phrases used in the safety data sheet

AUH032	Contact with acids liberates very toxic gas.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC_{50}	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
ES	Identification code for each substance listed in EINECS
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC_{50}	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD_{50}	Lethal dose of a substance in which it can be expected death of 50% of the population
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution from Ships
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
SWA (Australia)	Safe Work Australia
TWA	Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)
UN	Four-figure identification number of the substance or article taken from the UN

	Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
STOT RE	Specific target organ toxicity - repeated exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

Australian Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals, July 2020

The changes (which information has been added, deleted or modified)

The first edition of the GHS (rev.7) version of the safety data sheet

More information

Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.

SAFETY DATA SHEET

according to WHS Regulations (Hazardous Chemicals)

Blocking Buffer, CD4 FITC/CD25 PE, FOXP3 APC

Creation date	20th November 2023		
Revision date		Version	1

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

1.1. Product identifier — Blocking Buffer, CD4 FITC/CD25 PE, FOXP3 APC

Substance / mixture — mixture

Number — ED7417-3, ED7417-4, ED7417-5

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

Mixture's intended use

diagnostic reagent

Mixture uses advised against

The product should not be used in ways other then those referred in Section 1.

1.3. Details of the supplier of the safety data sheet

Supplier/Local address

Name or trade name	Sysmex Australia Pty Ltd
Address	Suite 3, Level 5 15 Talavera Rd Macquarie Park NSW 2113
Phone	+61 2 9016 3040

Manufacturer

Name or trade name	EXBIO Praha, a.s.
Address	Nad Safinou II / 341, Vestec, 25250 Czech Republic
Phone	+420261090666
E-mail	orders@exbio.cz
Web address	www.exbio.cz

Competent person responsible for the safety data sheet

Name	EXBIO Praha, a.s.
E-mail	orders@exbio.cz

1.4. Emergency telephone number

For medical advice (English): **13 11 26** (Poisons Information Centre)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture is not classified as dangerous according to the WHS Regulations.

Full text of all classifications and hazard statements is given in the section 16.

2.2. Label elements

none

2.3. Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to GHS
Index: 011-004-00-7 CAS: 26628-22-8 EC: 247-852-1	sodium azide	<0.099	Acute Tox. 2, H300+H330 Acute Tox. 1, H310 STOT RE 2, H373 (ingestion) Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) AUH032

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air.

If on skin

Remove contaminated clothes.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person.

If swallowed

Rinse out the mouth with clean water. In the event of issues, find medical help.

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

If inhaled

Possible irritation of airways, cough, headache.

If on skin

Not expected.

If in eyes

Possible irritation.

If swallowed

Nausea, stomach pain, vomiting, diarrhoea.

4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with chemical resistant gloves. Use a self-contained breathing apparatus and full-body protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Follow the instructions in the Sections 7 and 8.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well-ventilated areas designated for this purpose.

7.3. Specific end use(s)

diagnostic reagent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

SWA (Australia)

Substance name (component)	Type	Value
sodium azide (CAS: 26628-22-8)	TWA (ppm)	0.11 Peak limitation
	TWA (mg/m^3)	0.3 Peak limitation

8.2. Exposure controls

Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest. Maintain air concentration below occupational exposure standards, using engineering controls if necessary

Eye/face protection

Protective goggles.

Skin protection

Hand protection: Protective gloves resistant to the product.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	without fragrance
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	100 °C
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	data not available
Kinematic viscosity	data not available
Solubility in water	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	
Density	1 g/cm^3 at 20 °C
Relative vapour density	data not available
Particle characteristics	data not available

9.2. Other information

not available

SECTION 10: Stability and reactivity

10.1. Reactivity

The mixture is not reactive under normal conditions of use and storage. Sodium azide can react with metals contained in sewage to form lead or copper azide, which can explode on impact. When reacting with acids, sodium azide can release highly toxic hydrogen azide acid / hydrogen azide gas.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Sodium azide can react with metals contained in sewage to form lead or copper azide, which can explode on impact.

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

sodium azide

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD_{50}	27 mg/kg		Rat (Rattus norvegicus)	
Dermal	LD_{50}	20 mg/kg		Rabbit	
Inhalation	LC_{50}	0.054 mg/l	4 hour	Rat (Rattus norvegicus)	

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.

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.

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

Aspiration hazard

Based on available data the classification criteria are not met.

11.2. Information on other hazards

The mixture does not contain substances with endocrine disrupting properties.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

sodium azide

Parameter	Value	Exposure time	Species	Environment
EC_{50}	5.6 mg/l	48 hour	Aquatic invertebrates	

12.2. Persistence and degradability

not available

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Not available.

12.6. Endocrine disrupting properties

None of the ingredients are listed.

12.7. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

SECTION 14: Transport information

14.1. UN number or ID number

not subject to transport regulations

14.2. UN proper shipping name

not relevant

14.3. Transport hazard class(es)

not relevant

14.4. Packing group

not relevant

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information

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

Classifications	Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).
Inventory listings	AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals) - All components are listed on AIIC, or are exempt.
	Australia Hazardous Chemical Information System (HCIS)
	Australian Inventory of Chemical Substances (AICS) - All ingredients are listed or exempt from listing.

15.2. Chemical safety assessment

not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H310	Fatal in contact with skin.
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H300+H330	Fatal if swallowed or if inhaled.

A list of additional standard phrases used in the safety data sheet

AUH032	Contact with acids liberates very toxic gas.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC_{50}	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
ES	Identification code for each substance listed in EINECS
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC_{50}	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD_{50}	Lethal dose of a substance in which it can be expected death of 50% of the population
log Kow	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution from Ships
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
SWA (Australia)	Safe Work Australia
TWA	Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
STOT RE	Specific target organ toxicity - repeated exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

Australian Code of Practice on Preparation of Safety Data Sheets for Hazardous Chemicals, July 2020

The changes (which information has been added, deleted or modified)

The first edition of the GHS (rev.7) version of the safety data sheet

More information

Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.
