

Revision Date 11-Sep-2024 Revision Number 5

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Description: EliA Calprotectin 2 Extraction Buffer

Cat No.: 83-1147-01

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

Recommended Use In vitro diagnostic Uses advised against All other uses

1.3. Details of the supplier of the safety data sheet

Company Phadia AB

Rapsgatan 7P P.O. Box 6460 751 37 UPPSALA

Sweden

+46 18 16 50 00

E-mail address safetydatasheet.idd@thermofisher.com

1.4. Emergency telephone number

CHEMTREC Ireland (Dublin) +(353)-19014670 CHEMTREC Belgium (Brussels) +(32)-28083237

Malta 112 Emergency phone number

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

Based on available data, the classification criteria are not met

Environmental hazards

Based on available data, the classification criteria are not met

For the full text of the H-statements mentioned in this Section, see Section 16.

2.2. Label elements

Revision Date 11-Sep-2024

None

2.3. Other hazards

This product does not contain any known or suspected endocrine disruptors.

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	EC No	Weight %	GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
Sodium azide	26628-22-8	EEC No. 247-852-1	<0.1	Acute Tox. 2 (H300) (EUH032) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Chromotrop	3567-69-9	EEC No. 222-657-4	<1	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)
Calcium chloride, dihydrate	10035-04-8		<1	Eye Irrit. 2 (H319)

Component	Specific concentration limits (SCL's)	M-Factor	Component notes
Sodium azide	-	1	-

For the full text of the H-statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If

eye irritation persists: Get medical advice/attention.

Skin Contact Wash off immediately with soap and plenty of water. Wash contaminated clothing before

reuse.

Ingestion Clean mouth with water and drink afterwards plenty of water. Consult a physician if

necessary.

Inhalation No special measures are necessary. Not an expected route of exposure.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

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

EliA Calprotectin 2 Extraction Buffer

None reasonably foreseeable.

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

Notes to Physician Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which must not be used for safety reasons

No information available.

5.2. Special hazards arising from the substance or mixture

None known.

Hazardous Combustion Products

None under normal use conditions.

5.3. Advice for firefighters

No information available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective gloves/clothing and eye/face protection.

6.2. Environmental precautions

Dispose of in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Wipe up with adsorbent material (e.g. cloth, fleece). Dispose of waste product or used containers according to local regulations.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Keep at temperatures between 2 and 8°C.

Revision Date 11-Sep-2024

Revision Date 11-Sep-2024

7.3. Specific end use(s)

Observe instructions for use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

List source(s): **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC

Component	European Union	The United Kingdom	France	Belgium	Spain
Sodium azide	TWA: 0.1 mg/m ³ (8h)	STEL: 0.3 mg/m3 15 min	TWA / VME: 0.1 mg/m ³	TWA: 0.1 mg/m ³ 8 uren	STEL / VLA-EC: 0.3
	STEL: 0.3 mg/m ³	TWA: 0.1 mg/m ³ 8 hr	(8 heures). restrictive	Huid	mg/m³ (15 minutos)
	(15min)	Skin	` limit		TWA / VLA-ED: 0.1
	Skin	2	STEL / VLCT: 0.3		mg/m³ (8 horas)
			mg/m ³ . restrictive limit		Piel
			Peau		1 101
Component	Italy	Germany	Portugal	The Netherlands	Finland
Sodium azide	TWA: 0.1 mg/m ³ 8 ore.	TWA: 0.2 mg/m ³ (8	STEL: 0.3 mg/m ³ 15	huid	TWA: 0.1 mg/m ³ 8
	Time Weighted Average	Stunden). AGW -	minutos	STEL: 0.3 mg/m ³ 15	tunteina
	STEL: 0.3 mg/m ³ 15	exposure factor 2	Ceiling: 0.29 mg/m ³	minuten	STEL: 0.3 mg/m ³ 15
	minuti. Short-term	TWA: 0.2 mg/m ³ (8	Ceiling: 0.11 ppm	TWA: 0.1 mg/m ³ 8 uren	minuutteina
	Pelle	Stunden). MAK	TWA: 0.1 mg/m ³ 8 horas		lho
		Höhepunkt: 0.4 mg/m ³	Pele		
	1				
Component	Austria	Denmark	Switzerland	Poland	Norway
Sodium azide	Haut	TWA: 0.1 mg/m ³ 8 timer	STEL: 0.4 mg/m ³ 15	STEL: 0.3 mg/m ³ 15	TWA: 0.1 mg/m ³ 8 tim
	MAK-KZGW: 0.3 mg/m ³	STEL: 0.3 mg/m ³ 15	Minuten	minutach	STEL: 0.3 mg/m ³ 15
	15 Minuten	minutter	TWA: 0.2 mg/m ³ 8	TWA: 0.1 mg/m ³ 8	minutter. value from t
	MAK-TMW: 0.1 mg/m ³ 8	Hud	Stunden	godzinach	regulation
	Stunden				
Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Sodium azide	TWA: 0.1 mg/m ³	kože	TWA: 0.1 mg/m ³ 8 hr.	Skin-potential for	TWA: 0.1 mg/m ³ 8
	STEL: 0.3 mg/m ³	TWA-GVI: 0.1 mg/m ³ 8	STEL: 0.3 mg/m ³ 15 min	cutaneous absorption	hodinách.
	Skin notation	satima.	Skin	STEL: 0.3 mg/m ³	Potential for cutaneou
	Citin Hotalion	STEL-KGVI: 0.3 mg/m ³	Gruii -	TWA: 0.1 mg/m ³	absorption
		15 minutama.		1 vv/ t. 0.1 mg/m	Ceiling: 0.3 mg/m ³
		13 minutama.			Celling. 0.5 mg/m²
Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Sodium azide	Nahk	Skin notation	STEL: 0.1 ppm	STEL: 0.3 mg/m ³ 15	STEL: 0.3 mg/m ³
	TWA: 0.1 mg/m ³ 8	TWA: 0.1 mg/m ³ 8 hr	STEL: 0.3 mg/m ³	percekben. CK	TWA: 0.1 mg/m ³ 8
	tundides.	STEL: 0.3 mg/m3 15 min	TWA: 0.1 ppm	TWA: 0.1 mg/m ³ 8	klukkustundum.
	STEL: 0.3 mg/m ³ 15	- · · · · · · · · · · · · · · · · ·	TWA: 0.3 mg/m ³	órában. AK	Skin notation
	minutites.			0.000	• • • • • • • • • • • • • • • • • • • •
	Timidateo:				
Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Sodium azide	skin - potential for	TWA: 0.1 mg/m³ IPRD	Possibility of significant	possibility of significant	Skin notation
Socium azide		Oda			
	cutaneous exposure		uptake through the skin	uptake through the skin	TWA: 0.1 mg/m ³ 8 o
	STEL: 0.3 mg/m ³	STEL: 0.3 mg/m ³	TWA: 0.1 mg/m ³ 8	TWA: 0.1 mg/m ³	STEL: 0.3 mg/m ³ 1
	TWA: 0.1 mg/m ³		Stunden	STEL: 0.3 mg/m ³ 15	minute
	I WA: 0.1 mg/m ³		Stunden STEL: 0.3 mg/m ³ 15	minuti	minute

Minuten

Slovenia

TWA: 0.1 mg/m³ 8 urah

Koža

STEL: 0.3 mg/m³ 15

minutah

Sweden

Binding STEL: 0.3

mg/m³ 15 minuter TLV: 0.1 mg/m³ 8

timmar. NGV

Russia

MAC: 2 mg/m³

Slovak Republic

Ceiling: 0.3 mg/m³

Potential for cutaneous

absorption

TWA: 0.1 mg/m³

Component

Sodium azide

Chromotrop

Turkey

Deri TWA: 0.1 mg/m³ 8 saat

STEL: 0.3 mg/m³ 15

dakika

EliA Calprotectin 2 Extraction Buffer

Revision Date 11-Sep-2024

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

Derived Minimum Effect Level (DMEL) / Derived No Effect Level (DNEL)

See table for values

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Sodium azide				DNEL = $46.7\mu g/kg$
26628-22-8 (<0.1)				bw/day

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Sodium azide 26628-22-8 (<0.1)				DNEL = 0.164mg/m ³

Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water	Water Intermittent	Microorganisms in	Soil (Agriculture)
		sediment		sewage treatment	
Sodium azide	PNEC = $0.35\mu g/L$	$PNEC = 16.7 \mu g/kg$	PNEC = $3.5\mu g/L$	PNEC = 30µg/L	
26628-22-8 (<0.1)		sediment dw			

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
Sodium azide	PNEC = 15ng/L	$PNEC = 0.72 \mu g/kg$	PNEC = 150ng/L		
26628-22-8 (<0.1)		sediment dw			

8.2. Exposure controls

Engineering Measures

None under normal use conditions.

Personal protective equipment

Eye Protection No special protective equipment required.

Hand Protection Protective gloves.

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Nitrile rubber	See manufacturers	-	EN 374	(minimum requirement)
	recommendations			

Skin and body protectionNo special protective equipment required.

Respiratory Protection No special protective equipment required.

EliA Calprotectin 2 Extraction Buffer

Revision Date 11-Sep-2024

Large scale/emergency use No special protective equipment required

Recommended Filter type:

Small scale/Laboratory use No personal respiratory protective equipment normally required.

Recommended half mask:-

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Dispose of contents/containers in accordance with local regulations.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State Liquid

Appearance Clear Orange

Odor None

Odor Threshold Not applicable

Melting Point/Range 0 °C

Softening Point No data available

Boiling Point/Range 100 °C

Flammability (liquid)

Flammability (solid,gas)

Explosion Limits

No data available

Not applicable

Not applicable

Flash Point Not applicable Method - No information available

Autoignition Temperature Not applicable

Decomposition TemperatureNo information available

pH 8,8-9,2

Viscosity No data available

Water Solubility Soluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Componentlog PowSodium azide0.3Calcium chloride, dihydrate0.05

Vapor Pressure No data available

Density / Specific Gravity

Bulk Density

No data available

Not applicable

Vapor Density No data available (Air = 1.0)

Particle characteristics Not applicable (liquid)

9.2. Other information

Explosive PropertiesOxidizing Properties
Not explosive
Not oxidising

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None known.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

EliA Calprotectin 2 Extraction Buffer

Hazardous Polymerization Hazardous Reactions

Hazardous polymerization does not occur.

None under normal processing.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

None under normal use conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

(a) acute toxicity;

Oral No data available.

Dermal No data available.

Inhalation No data available.

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium azide	LD50 = 27 mg/kg (Rat)	20 mg/kg (Rabbit)	37 mg/l (Rat)
Chromotrop	LD50 > 10 g/kg (Rat)	LD50 > 2000 mg/kg (Rat)	

(b) skin corrosion/irritation; No data available.

(c) serious eye damage/irritation; No data available.

(d) respiratory or skin sensitization;

Respiratory No data available. No data available.

(e) germ cell mutagenicity; No data available.

(f) carcinogenicity; There are no known carcinogenic chemicals in this product.

Component	Test method	Test species / Duration	Study result
Sodium azide			No ingredient of this product
			present at levels greater than or
			equal to 0.1% is identified as
			probable, possible or confirmed
			human carcinogen by IARC.

(g) reproductive toxicity; No data available.

(h) STOT-single exposure; No data available.

(i) STOT-repeated exposure; No data available.

(j) aspiration hazard; No data available.

Revision Date 11-Sep-2024

EliA Calprotectin 2 Extraction Buffer

 Component
 Other Adverse Effects

 Sodium azide
 Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing. Harmful to

Symptoms / effects,both acute and delayed No information available.

11.2. Information on other hazards

Endocrine Disrupting Properties This product does not contain any known or suspected endocrine disruptors.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity effects No information available.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Sodium azide	LC50 96 h 0.7 mg/L	EC50 4.2 mg/l 48 h (EC50 38.5 mg/l (
	LC50 96 h	Daphnia pulex)	IC50 272 mg/l (green	Photobacterium
	LC50 0.7 mg/l 96 H (algae)	phosphoreum)
	Lepomis macrochirus)			
Calcium chloride, dihydrate	Lepomis macrochirus:	EC50: 3005 mg/L/48h	-	-
•	LC50: 10650 mg/L/96h			

12.2. Persistence and degradability No information available.

12.3. Bioaccumulative potential No information available.

Component	log Pow	Bioconcentration factor (BCF)
Sodium azide	0.3	
Calcium chloride, dihydrate	0.05	

12.4. Mobility in soil No information available.

12.5. Results of PBT and vPvB

<u>assessment</u>

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This preparation contains no substance considered to be very persistent nor

very bioaccumulating (vPvB).

12.6. Endocrine disrupting

properties

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

Persistent Organic Pollutant No **Ozone Depletion Potential** No

No known effect. No known effect.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused

Products

Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of in accordance with local regulations.

Revision Date 11-Sep-2024

central nervous system and heart. Fatal if swallowed.

EliA Calprotectin 2 Extraction Buffer

Revision Date 11-Sep-2024

European Waste Catalogue (EWC)

18 01 07 Chemicals other than those mentioned in 18 01 06.

Other Information No information available.

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

ADR Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

IATA Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

No hazards identified. 14.5. Environmental hazards

14.6. Special precautions for user No special precautions required.

14.7. Maritime transport in bulk

according to IMO instruments

Not applicable, packaged goods.

SECTION 15: REGULATORY INFORMATION

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

International Inventories X = listed

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	IECSC	AICS	KECL
Sodium azide	247-852-1	-		Х	Х	-	Χ	Х	Х	Х	KE-3135
											7
Chromotrop	222-657-4	-		Х	Х	-	Χ	Х	Х	Х	KE-2088
											8
Calcium chloride, dihydrate	-	-	·	-	-	-	Х	X	Х	X	-

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	
Chromotrop		Use restricted. See entry 75.	
		(see link for restriction details)	
Calcium chloride, dihydrate		Use restricted. See item 75.	
		(see link for restriction details)	

Component	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
Sodium azide	H2 50-200 ton, E1 100-200 ton	H2 50-200 ton, E1 100-200 ton

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and

EliA Calprotectin 2 Extraction Buffer

Revision Date 11-Sep-2024

import of dangerous chemicals

Not applicable

National Regulations

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Sodium azide	WGK2	

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment. Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values .

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) is not required.

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H335 - May cause respiratory irritation

H300 - Fatal if swallowed

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

H335 - May cause respiratory irritation

H315 - Causes skin irritation

H319 - Causes serious eye irritation

Legend

CAS - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

> **ENCS** - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

DNEL - Derived No Effect Level

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate VOC (volatile organic compound)

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Physical hazards On basis of test data **Health Hazards** Calculation method **Environmental hazards** Calculation method

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

EliA Calprotectin 2 Extraction Buffer

Revision Date 11-Sep-2024

Revision Summary SDS sections updated, 3, 7.

This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Disclaimer

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

End of Safety Data Sheet

EliA Calprotectin 2 Extraction Buffer

Revision Date 11-Sep-2024