02/22/2024	Kit Components	
Product code	Description	

3308-0010	GSP Neonatal Phenylalanine kit
I and the second	3308-0010, 3308-001B, 3308-0010Z, 3308-001BZ

Components:

13807549	Neonatal Extraction Solution
13807547	Neonatal Phenylalanine Enzyme Reagent
13807546	Neonatal Phenylalanine Assay Buffer
13807548	Neonatal Phenylalanine Substrate Reagent





Printing date 02/22/2024 Reviewed on 11/07/2023

1 Identification

- · Product identifier
- · Trade name: Neonatal Extraction Solution
- · Article number: 13807549
- · Application of the substance / the mixture

Laboratory chemicals In vitro diagnostics

- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Revvity Inc.
Wallac Oy
P.O. Box 10
FI-20101 Turku
Finland
+358 2 2678 111

· Information department:

Product safety department. MSDS Turku@revvity.com

· Emergency telephone number:

CHEMTREC (within U.S.) 800 424-9300

CHEMTREC (from outside U.S.) +1-703-572-3887

2 Hazard identification

· Classification of the substance or mixture



GHS02 Flame

Flammable Liquids - Category 2 H225 Highly flammable liquid and vapour.



GHS05 Corrosion

Serious Eye Damage - Category 1 H318 Causes serious eye damage.



GHS07

Specific Target Organ Toxicity - Single Exposure - H336 May cause drowsiness or dizziness. Category 3

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)

(Contd. of page 1)

Safety Data Sheet according to HPR, Schedule 1

Reviewed on 11/07/2023 Printing date 02/22/2024

Trade name: Neonatal Extraction Solution

· Hazard pictograms







GHS02

GHS05

· Signal word Danger

· Hazard-determining components of labeling:

Zinc sulfate heptahydrate propan-2-ol

· Hazard statements

Highly flammable liquid and vapour.

Causes serious eye damage.

May cause drowsiness or dizziness.

· Precautionary statements

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Ground and bond container and receiving equipment.

Use explosion-proof [electrical/ventilating/lighting] equipment.

Use non-sparking tools.

Take actions to prevent static discharges.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

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

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 3Fire = 3

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *3

Fire = 3

REACTIVITY 0

Reactivity = 0

3 Composition/Information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous	components:	
67-63-0	propan-2-ol	20-50% w/w *
7446-20-0	Zinc sulfate heptahydrate	≥3-≤5% w/w *

^{*} Actual concentration ranges are withheld as a trade secret.

(Contd. on page 3)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Extraction Solution

(Contd. of page 2)

· Other ingredients

7732-18-5 water

50-75% w/w

4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Prevent seepage into sewage system, workpits and cellars.

Dilute with plenty of water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

· 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.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.

(Contd. on page 4)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Extraction Solution

(Contd. of page 3)

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

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· Specific end use(s) No further relevant information available.

8 Exposure controls/ Personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

67-63-0 propan-2-ol

EL STEL: 400 ppm

TWA: 200 ppm

EV STEL: 400 ppm

TWA: 200 ppm

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

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

· Eye protection:



Tightly sealed goggles

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Extraction Solution

(Contd. of page 4)

· Information on basic physical and	chemical properties
· General Information	
· Appearance:	C 1 C
Form:	Solution Clear
Color: · Odor:	Sulphurous
· Odor threshold:	Not determined.
· pH-value at 20 °C:	4.5
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	82 °C
· Flash point:	13 °C
· Flammability (solid, gaseous):	Highly flammable.
· Auto igniting:	425 °C
· Decomposition temperature:	Not determined.
· Ignition temperature:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vap mixtures are possible.
· Explosion limits:	
Lower:	2 Vol %
Upper:	12 Vol %
· Vapor pressure at 20 °C:	43 hPa
· Density at 20 °C:	0.96g/cm^3
Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
Water:	Fully miscible.
· Partition coefficient (n-octanol/wat	er): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	32.8 %
Water:	64.3 %
Solids content:	0.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.

(Contd. on page 6)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Extraction Solution

(Contd. of page 5)

· Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- · Acute toxicity:

· LD/LC50	values	that	are	relevant _.	for	classification:
-----------	--------	------	-----	-----------------------	-----	-----------------

67-63-0 propan-2-ol

-	-	
Oral	LD50	5,045 mg/kg (rat)
Dermal	LD50	12,800 mg/kg (rabbit)
Inhalative	LC50/4 h	30 mg/l (rat)

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: Strong irritant with the danger of severe eye injury.
- · Sensitization: No sensitizing effects known.
- Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

67-63-0 propan-2-ol

3

· NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even small quantities leak into the ground.

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

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Hand over to hazardous waste disposers.

(Contd. on page 7)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Extraction Solution

· Recommended cleansing agent: Water, if necessary with cleansing agents.

(Contd. of page 6)

Transport information	
UN-Number DOT/TDG, ADR, IMDG, IATA	UN1993
UN proper shipping name DOT/TDG ADR	Flammable liquids, n.o.s. (Isopropanol) 1993 Flammable liquids, n.o.s. (Isopropan
IMDG	ENVIRONMENTALLY HAZARDOUS FLAMMABLE LIQUID, N.O.S. (ISOPROPAN (ISOPROPYL ALCOHOL), Zinc sulfate heptahydromanne Pollutant
IATA	FLAMMABLE LIQUID, N.O.S. (ISOPROPAN (ISOPROPYL ALCOHOL) solution)
Transport hazard class(es)	
DOT/TDG (Transport dangerous goods):	
Class Label	3 Flammable liquids
ADR, IMDG	
Class Label	3 Flammable liquids 3
IATA	
Class Label	3 Flammable liquids 3
Packing group DOT/TDG, ADR, IMDG, IATA	II
Environmental hazards:	Product contains environmentally hazardous substances: sulfate heptahydrate
Marine pollutant:	No Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
Special precautions for user Hazard identification number (Kemler code). EMS Number: Stowage Category	F-E, <u>S-E</u>
	B

(Contd. on page 8)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Extraction Solution

	(Contd. of page
Transport/Additional information:	
DOT/TDG	
Quantity limitations	On passenger aircraft/rail: 5 L
	On cargo aircraft only: 60 L
ADR	
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
<i>IMDG</i>	
Limited quantities (LQ)	IL
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPANO
8	(ISOPROPYL ALCOHOL)), 3, II, ENVIRONMENTALL
	HAZARDOUS

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- ·Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

67-63-0 propan-2-ol

· TSCA (Toxic Substances Control Act):

7732-18-5 water ACTIVE 67-63-0 propan-2-ol ACTIVE

- Canadian substance listings:
- · Canadian Domestic Substances List (DSL)

All ingredients are listed.

· Canadian Non-Domestic Substances List (NDSL)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

67-63-0 propan-2-ol

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms







GHS02 GHS05 GI

· Signal word Danger

(Contd. on page 9)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Extraction Solution

(Contd. of page 8)

· Hazard-determining components of labeling:

Zinc sulfate heptahydrate

propan-2-ol

· Hazard statements

Highly flammable liquid and vapour.

Causes serious eye damage.

May cause drowsiness or dizziness.

· Precautionary statements

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Ground and bond container and receiving equipment.

Use explosion-proof [electrical/ventilating/lighting] equipment.

Use non-sparking tools.

Take actions to prevent static discharges.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

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

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product safety department.
- · Contact: MSDS_Turku@revvity.com
- Date of the latest revision of the safety data sheet 02/22/2024
- · Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

* Data compared to the previous version altered.

CA





Printing date 02/22/2024 Reviewed on 11/07/2023

1 Identification

- · Product identifier
- · Trade name: Neonatal Phenylalanine Enzyme Reagent
- · Article number: 13807547
- · Application of the substance / the mixture

In vitro diagnostics Laboratory chemicals

- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Revvity Inc. Wallac Oy P.O. Box 10 FI-20101 Turku Finland +358 2 2678 111

· Information department:

Product safety department.

MSDS Turku@revvity.com

Emergency telephone number:

CHEMTREC (within U.S.) 800 424-9300

CHEMTREC (from outside U.S.) +1-703-572-3887

2 Hazard identification

· Classification of the substance or mixture

The product is not classified, according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Classification system:
- NFPA ratings (scale 0 4)



Health = 0 Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0
 Fire = 0
 Reactivity = 0

3 Composition/Information on ingredients

- · Chemical characterization: Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components: Void

(Contd. on page 2)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Phenylalanine Enzyme Reagent

		(Contd. of page 1)
· Other ingre	dients	
	Albumins, bovine serum	75-90% w/w
	Dehydrogenase, lipoamide	5-10% w/w
10049-21-5	phosphoric acid, monosodium salt, monohydrate	2.5-5% w/w
62758-13-8	7-sodiooxy-3H-phenoxazin-3-one 10-oxide	≤2.5% w/w
69403-12-9	L-Phenylalanine Dehydrogenase	<1% w/w

4 First-aid measures

- · 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: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: No special measures required.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- · 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.

7 Handling and storage

- · Handling:
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

CA

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Phenylalanine Enzyme Reagent

(Contd. of page 2)

8 Exposure controls/ Personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters
- · Components 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.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- · Breathing equipment: Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

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

· Eye protection: Not required.

Physical and chemical properties		
chemical properties		
~~~~		
2		
1		
Not determined.		
Not applicable.		
Undetermined. Undetermined.		
Not applicable.		
Not determined.		
Not determined.		
Product is not selfigniting.		
Product does not present an explosion hazard.		
Not determined.		
Not determined.		
	Solid Blue Sulphurous Not determined.  Undetermined. Undetermined. Undetermined. Not applicable.  Not applicable.  Not determined. Product is not selfigniting.  Product does not present an explosion hazard.	

(Contd. on page 4)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Phenylalanine Enzyme Reagent

		(Contd. of page
· Vapor pressure at 20 °C:	23 hPa	
· Density:	Not determined.	
Relative density	Not determined.	
· Vapor density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
Water:	Insoluble.	
· Partition coefficient (n-octanol/wa	t <b>ter):</b> Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Solvent content:		
Solids content:	3.8 %	
· Other information	No further relevant information available.	

#### 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

#### 11 Toxicological information

- Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

#### 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.

(Contd. on page 5)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Phenylalanine Enzyme Reagent

(Contd. of page 4)

- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Not hazardous for water.
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

#### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation: Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- · Recommendation: Hand over to hazardous waste disposers.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

UN-Number DOT/TDG, ADR, ADN, IMDG, IATA	Void
UN proper shipping name DOT/TDG, ADR, ADN, IMDG, IATA	Void
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA Class	Void
Packing group DOT/TDG, ADR, IMDG, IATA	Void
Environmental hazards: Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II MARPOL73/78 and the IBC Code	of Not applicable.
UN "Model Regulation":	Void

#### 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara

· Section	355	(ovtromoly	hazardous	substances):
Secuon	JJJ	i exii emeiv	nuz.ur uvus	substancest.

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

• <i>TSCA</i>	(Toxic Substances	Control	Act):
---------------	-------------------	---------	-------

9048-46-8	Albumins, bovine serum	ACTIVE
9001-18-7	Dehydrogenase, lipoamide	ACTIVE

(Contd. on page 6)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Phenylalanine Enzyme Reagent

62758-13-8 7-sodiooxy-3H-phenoxazin-3-one 10-oxide

(Contd. of page 5)

ACTIVE

· Canadian substance listings:

· Canadian Domestic Substances List (DSL)

9048-46-8 Albumins, bovine serum

62758-13-8 7-sodiooxy-3H-phenoxazin-3-one 10-oxide

· Canadian Non-Domestic Substances List (NDSL)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product safety department.
- · Contact: MSDS Turku@revvity.com
- Date of the latest revision of the safety data sheet 02/22/2024
- · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

CA





Printing date 02/22/2024 Reviewed on 11/07/2023

#### 1 Identification

- · Product identifier
- · Trade name: Neonatal Phenylalanine Assay Buffer
- · Article number: 13807546
- · Application of the substance / the mixture

In vitro diagnostics Laboratory chemicals

- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Revvity Inc. Wallac Oy P.O. Box 10 FI-20101 Turku Finland +358 2 2678 111

· Information department:

Product safety department.

MSDS Turku@revvity.com

Emergency telephone number:

CHEMTREC (within U.S.) 800 424-9300

CHEMTREC (from outside U.S.) +1-703-572-3887

#### 2 Hazard identification

· Classification of the substance or mixture

The product is not classified, according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Classification system:
- NFPA ratings (scale 0 4)



Health = 0 Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0
 Fire = 0
 Reactivity = 0

#### 3 Composition/Information on ingredients

- · Chemical characterization: Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components: Void

(Contd. on page 2)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Phenylalanine Assay Buffer

		(Contd. of page 1)
· Other ingred	lients	
7732-18-5	water	90-100% w/w
56-40-6	· ·	2.5-5% w/w
26628-22-8	sodium azide	<0.1% w/w

#### 4 First-aid measures

- · 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: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

#### 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · **Protective equipment:** No special measures required.

#### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Dilute with plenty of water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· 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.

#### 7 Handling and storage

- · Handling:
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

#### 8 Exposure controls/ Personal protection

· Additional information about design of technical systems: No further data; see section 7.

(Contd. on page 3)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Phenylalanine Assay Buffer

(Contd. of page 2)

#### · Control parameters

#### · Components 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.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- · Breathing equipment: Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

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

· Eve protection: Goggles recommended during refilling.

Information on basis physical and	ahamiaal nyonaytias	
Information on basic physical and	cnemicai properties	
General Information Appearance:		
Form:	Fluid	
Color:	Colorless	
Odor:	Sulphurous	
Odor threshold:	Not determined.	
pH-value at 20°C:	9.6	
Change in condition		
Melting point/Melting range:	$0~^{\circ}C$	
Boiling point/Boiling range:	Undetermined.	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Decomposition temperature:	Not determined.	
Ignition temperature:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C:	23 hPa	
Density at 20 °C:	1.02 g/cm³	
Relative density	Not determined.	
Vapor density	Not determined.	

(Contd. on page 4)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Phenylalanine Assay Buffer

		(Contd. of page 3
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octanol	<b>//water):</b> Not determined.	
· Viscosity:		
Dynamic at 20 °C:	0.952 mPas	
Kinematic:	Not determined.	
· Solvent content:		
Water:	96.3 %	
Solids content:	0.0 %	
· Other information	No further relevant information available.	

#### 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

#### 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

#### 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.

(Contd. on page 5)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Phenylalanine Assay Buffer

(Contd. of page 4)

- · Additional ecological information:
- · General notes: Not hazardous for water.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

#### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation: Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- · Recommendation: Hand over to hazardous waste disposers.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

Transport information	
UN-Number DOT/TDG, ADR, IMDG, IATA	Void
UN proper shipping name DOT/TDG, ADR, IMDG, IATA	Void
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA Class	Void
Packing group DOT/TDG, ADR, IMDG, IATA	Void
Environmental hazards: Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
UN "Model Regulation":	Void

#### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara
- · Section 355 (extremely hazardous substances):

26628-22-8 sodium azide

· Section 313 (Specific toxic chemical listings):

26628-22-8 sodium azide

- · TSCA (Toxic Substances Control Act):
- All components have the value ACTIVE.
- · Canadian substance listings:
- · Canadian Domestic Substances List (DSL)

All ingredients are listed.

(Contd. on page 6)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Phenylalanine Assay Buffer

(Contd. of page 5)

· Canadian Non-Domestic Substances List (NDSL)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

- · **GHS label elements** Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product safety department.
- · Contact: MSDS Turku@revvity.com
- Date of the latest revision of the safety data sheet 02/22/2024
- · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

-CA





Printing date 02/22/2024 Reviewed on 11/07/2023

#### 1 Identification

- · Product identifier
- · Trade name: Neonatal Phenylalanine Substrate Reagent
- · Article number: 13807548
- · Application of the substance / the mixture

In vitro diagnostics Laboratory chemicals

- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Revvity Inc. Wallac Oy P.O. Box 10 FI-20101 Turku Finland +358 2 2678 111

· Information department:

Product safety department. MSDS Turku@revvity.com

· Emergency telephone number:

CHEMTREC (within U.S.) 800 424-9300

CHEMTREC (from outside U.S.) +1-703-572-3887

#### 2 Hazard identification

· Classification of the substance or mixture

The product is not classified, according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Classification system:
- NFPA ratings (scale 0 4)



Health = 0 Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0
 Fire = 0
 Reactivity = 0

#### 3 Composition/Information on ingredients

- · Chemical characterization: Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components: Void

(Contd. on page 2)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Phenylalanine Substrate Reagent

		(Contd. of page 1)
· Other ingre	dients	
53-84-9	nadide	90-100% w/w
9048-46-8	Albumins, bovine serum	5-10% w/w
10049-21-5	phosphoric acid, monosodium salt, monohydrate	≤2.5% w/w

#### 4 First-aid measures

- 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: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

#### 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · **Protective equipment:** No special measures required.

#### 6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions: No special measures required.
- · Methods and material for containment and cleaning up: Pick up mechanically.
- Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

#### 7 Handling and storage

- · Handling:
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Specific end use(s) No further relevant information available.

#### 8 Exposure controls/ Personal protection

· Additional information about design of technical systems: No further data; see section 7.

(Contd. on page 3)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Phenylalanine Substrate Reagent

(Contd. of page 2)

#### · Control parameters

#### · Components 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.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- · Breathing equipment: Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### · Penetration time of glove material

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

• Eye protection: Not required.

Information on basic physical and	chamical proporties
General Information	chemical properties
Appearance:	
Form:	Solid
Color:	White
Odor:	Sulphurous
Odor threshold:	Not determined.
pH-value:	Not applicable.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not determined.
Decomposition temperature:	Not determined.
Ignition temperature:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not applicable.
Density:	Not determined.
Relative density	Not determined.
Vapor density	Not applicable.

(Contd. on page 4)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Phenylalanine Substrate Reagent

		(Contd. of page 3
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with	!	
Water:	Insoluble.	
· Partition coefficient (n-octan	ol/water): Not determined.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Solvent content:		
Solids content:	100.0 %	
· Other information	No further relevant information available.	

#### 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

### 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

#### 12 Ecological information

- · Toxicit
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water

(Contd. on page 5)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Phenylalanine Substrate Reagent

(Contd. of page 4)

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

#### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation: Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- · Recommendation: Hand over to hazardous waste disposers.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

UN-Number DOT/TDG, ADR, ADN, IMDG, IATA	Void
UN proper shipping name DOT/TDG, ADR, ADN, IMDG, IATA	Void
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA Class	Void
Packing group DOT/TDG, ADR, IMDG, IATA	Void
Environmental hazards: Marine pollutant:	No

Not applicable.

Not applicable.

### 15 Regulatory information

· UN "Model Regulation":

· Special precautions for user

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code

· Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

Void

· Sara

· Section 355 (extremely hazardous substances):
None of the ingredients is listed.
· Section 313 (Specific toxic chemical listings):
None of the ingredients is listed

TSCA (Toxic Substances Control Act):

53-84-9	nadide	ACTIVE
9048-46-8	Albumins, bovine serum	ACTIVE

· Canadian substance listings:

· Canadian	· Canadian Domestic Substances List (DSL)		
53-84-9	nadide		
9048-46-8	Albumins, bovine serum		

(Contd. on page 6)

Printing date 02/22/2024 Reviewed on 11/07/2023

Trade name: Neonatal Phenylalanine Substrate Reagent

(Contd. of page 5)

· Canadian Non-Domestic Substances List (NDSL)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

- · **GHS label elements** Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Product safety department.
- · Contact: MSDS Turku@revvity.com
- Date of the latest revision of the safety data sheet 02/22/2024
- · Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

-CA