| 02/20/2024 | Kit Components | |
|--------------|----------------|--|
| Product code | Description | |
| | | |

| B067-101 | AutoDELFIA hAFP/Free hCGβ Dual kit |
|----------|------------------------------------|
| | B067-101, B067-201 |

Components:

| 13803301 | hAFP/hCGß standards |
|----------|------------------------------|
| 13803302 | Anti-hAFP-Eu, stock solution |
| 13803303 | Anti-hCGβ-Sm, stock solution |
| 13802700 | DELFIA-2 Buffer |





Printing date 02/20/2024 Reviewed on 02/20/2024

1 Identification

- · Product identifier
- · Trade name: hAFP/hCG\beta standards
- · Article number: 13803301
- · 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 = *1
Fire = 0
Reactivity = 0

3 Composition/Information on ingredients

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

(Contd. on page 2)

Printing date 02/20/2024 Reviewed on 02/20/2024

Trade name: hAFP/hCG\beta standards

| | | (Contd. of page 1) |
|---------------|--|--------------------|
| · Dangerous | components: | |
| 7647-01-0 | hydrogen chloride | ≥1-≤2.5% w/w * |
| * Actual co | ncentration ranges are withheld as a trade secret. | |
| · Other ingre | dients | |
| 9048-46-8 | Albumins, bovine serum | 75-90% w/w |
| 7647-14-5 | sodium chloride | 5-10% w/w |
| 77-86-1 | trometamol | 5-10% w/w |
| 26628-22-8 | sodium azide | <1% w/w |
| 10035-04-8 | calcium chloride, dihydrate | <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.

(Contd. on page 3)

Printing date 02/20/2024 Reviewed on 02/20/2024

Trade name: hAFP/hCG\beta standards

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

(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:

7647-01-0 hydrogen chloride

EL Ceiling: 2 ppm EV Ceiling: 2 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:

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.

9 Physical and chemical properties

| · Information on basic physical and chemical proper | propertie | ucai | cnem | ana | vsicai | pn | basic | on | mation | · Into | |
|---|-----------|------|------|-----|--------|----|-------|----|--------|--------|--|
|---|-----------|------|------|-----|--------|----|-------|----|--------|--------|--|

· General Information

· Appearance:

Form: Solid

Color: According to product specification

· Odor: Characteristic · Odor threshold: Not determined.

Not applicable. · pH-value:

· Change in condition

Melting point/Melting range: Undetermined. 1,461 °C Boiling point/Boiling range: · Flash point: Not applicable. Not determined. · Flammability (solid, gaseous): Not determined. · Decomposition temperature: · Ignition temperature: Product is not selfigniting. · Danger of explosion: Product does not present an explosion hazard.

(Contd. on page 4)

Printing date 02/20/2024 Reviewed on 02/20/2024

Trade name: hAFP/hCG\beta standards

| | | (Contd. of pag |
|------------------------------------|--|----------------|
| Explosion limits: | | |
| Lower: | Not determined. | |
| Upper: | Not determined. | |
| Vapor pressure: | Not applicable. | |
| Density at 20 °C: | 1.12 g/cm³ | |
| Relative density | Not determined. | |
| Vapor density | Not applicable. | |
| Evaporation rate | Not applicable. | |
| Solubility in / Miscibility with | | |
| Water: | Insoluble. | |
| Partition coefficient (n-octanol/w | ater): Not determined. | |
| Viscosity: | | |
| Dynamic: | Not applicable. | |
| Kinematic: | Not applicable. | |
| Solvent content: | | |
| Solids content: | 10.2 % | |
| 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:

| · LD/LC50 values that are relevant for classification: | | | | |
|--|-------------------|-------------------|--|--|
| | 22-8 sodium azide | | | |
| Oral | LD50 (dynamic) | 27 mg/kg (rat) | | |
| Dermal | LD50 | 20 mg/kg (rabbit) | | |

- 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) | | |
|--|--|---|
| 7647-01-0 hydrogen chloride | | 3 |
| | | |

(Contd. on page 5)

Printing date 02/20/2024 Reviewed on 02/20/2024

Trade name: hAFP/hCG\beta standards

(Contd. of page 4)

· 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 1 (Self-assessment): slightly 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.

| 14 Transport information | |
|---|-----------------------|
| · 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.

(Contd. on page 6)

Printing date 02/20/2024 Reviewed on 02/20/2024

Trade name: hAFP/hCG\beta standards

| · Sara | | (Contd. of page 5) |
|---------------|--|--------------------|
| ~ *** ** | (extremely hazardous substances): | |
| | hydrogen chloride | |
| 26628-22-8 | sodium azide | |
| · Section 313 | (Specific toxic chemical listings): | |
| | hydrogen chloride | |
| 26628-22-8 | sodium azide | |
| · TSCA (Tox | ic Substances Control Act): | |
| 9048-46-8 | Albumins, bovine serum | ACTIVE |
| 7647-14-5 | sodium chloride | ACTIVE |
| 77-86-1 | trometamol | ACTIVE |
| 7647-01-0 | hydrogen chloride | ACTIVE |
| 26628-22-8 | sodium azide | ACTIVE |
| · Canadian s | ubstance listings: | |
| · Canadian L | Oomestic Substances List (DSL) | |
| | Albumins, bovine serum | |
| 7647-14-5 | sodium chloride | |
| | trometamol | |
| | hydrogen chloride | |
| 26628-22-8 | sodium azide | |
| · Canadian N | Ion-Domestic Substances List (NDSL) | |
| None of the | ingredients is listed. | |
| · Canadian I | ngredient Disclosure list (limit 0.1%) | |
| None of the | ingredients is listed. | |
| · Canadian I | ngredient Disclosure list (limit 1%) | |
| 7647-01-0 | hydrogen chloride | |
| | | |

- · **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 02/20/2024
- · 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)

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.





Printing date 02/20/2024 Reviewed on 02/20/2024

1 Identification

- · Product identifier
- · Trade name: Anti-hAFP-Eu, stock solution
- · Article number: 13803302
- · 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 F1-20101 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)



0 Health = 00 Fire = 0

TY 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 02/20/2024 Reviewed on 02/20/2024

Trade name: Anti-hAFP-Eu, stock solution

(Contd. of page 1)

| | · Other ingredients | | | |
|------------|---|-------------|--|--|
| 7732-18-5 | water | 90-100% w/w | | |
| 7647-14-5 | sodium chloride | <1% w/w | | |
| | trometamol | <1% w/w | | |
| | hydrogen chloride | <1% w/w | | |
| | Albumins, blood plasma, Cohn fraction V | <0.1% 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

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
- 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.

(Contd. on page 3)

Printing date 02/20/2024 Reviewed on 02/20/2024

Trade name: Anti-hAFP-Eu, stock solution

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

(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: Goggles recommended during refilling.

| | properties |
|--|------------|

| 7 - NJSOM MINISTER | 71 hysical and chemical properties | | |
|---|---|--|--|
| · Information on basic physical and · · General Information · Appearance: | chemical properties | | |
| Form: | Fluid | | |
| Color: | According to product specification | | |
| · Odor: | Characteristic | | |
| · Odor threshold: | Not determined. | | |
| · pH-value at 20 °C: | 7.75 | | |
| · Change in condition Melting point/Melting range: Boiling point/Boiling range: | 0 °C 100 °C | | |
| · 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. | | |

(Contd. on page 4)

Printing date 02/20/2024 Reviewed on 02/20/2024

Trade name: Anti-hAFP-Eu, stock solution

| | | (Contd. of page |
|---------------------------------------|--|-----------------|
| Upper: | Not determined. | |
| · Vapor pressure at 20 °C: | 23 hPa | |
| Density at 20 °C: | 1.02 g/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/wa | iter): Not determined. | |
| · Viscosity: | | |
| Dynamic at 20 °C: | 0.952 mPas | |
| Kinematic: | Not determined. | |
| · Solvent content: | | |
| Water: | 98.0 % | |
| Solids content: | 0.9 % | |
| · 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) | |
|--|---|
| 7647-01-0 hydrogen chloride | 3 |
| · NTP (National Toxicology Program) | |
| None of the ingredients is listed. | |

- CA

Printing date 02/20/2024 Reviewed on 02/20/2024

Trade name: Anti-hAFP-Eu, stock solution

(Contd. of page 4)

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: 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 | Nof 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): |
|---------------|-----------------------------------|
| 7647-01-0 | hydrogen chloride |
| 26628-22-8 | sodium azide |

(Contd. on page 6)

Printing date 02/20/2024 Reviewed on 02/20/2024

Trade name: Anti-hAFP-Eu, stock solution

| | | (Contd. of page 5 |
|---------------|-------------------------------------|-------------------|
| · Section 313 | (Specific toxic chemical listings): | |
| 7647-01-0 | hydrogen chloride | |
| 26628-22-8 | sodium azide | |
| · TSCA (Toxi | ic Substances Control Act): | |
| 7732-18-5 | water | ACTIVE |
| 7647-14-5 | sodium chloride | ACTIVE |
| 77-86-1 | trometamol | ACTIVE |
| 7647-01-0 | hydrogen chloride | ACTIVE |
| 26628-22-8 | sodium azide | ACTIVE |
| · Canadian sı | ubstance listings: | |
| · Canadian D | omestic Substances List (DSL) | |
| 7732-18-5 | water | |

· Canadian Non-Domestic Substances List (NDSL)

None of the ingredients is listed.

7647-14-5 sodium chloride 77-86-1 trometamol 7647-01-0 hydrogen chloride 26628-22-8 sodium azide

· 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 02/20/2024
- · 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

· * Data compared to the previous version altered.





Printing date 02/20/2024 Reviewed on 02/20/2024

1 Identification

- · Product identifier
- · Trade name: Anti-hCGβ-Sm, stock solution
- · Article number: 13803303
- · 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 02/20/2024 Reviewed on 02/20/2024

Trade name: Anti-hCG\u03b3-Sm, stock solution

| | | (Contd. of page 1) |
|---------------|---|--------------------|
| · Other ingre | | |
| 7732-18-5 | water | 90-100% w/w |
| 7647-14-5 | sodium chloride | <1% w/w |
| 77-86-1 | trometamol | <1% w/w |
| | Albumins, blood plasma, Cohn fraction V | <0.1% 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

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.

(Contd. on page 3)

Printing date 02/20/2024 Reviewed on 02/20/2024

Trade name: Anti-hCGβ-Sm, stock solution

(Contd. of page 2)

· 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:

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: Goggles recommended during refilling.

| 9 Physical | and | chemica | al prope | rties |
|--------------|-----|---------|----------|-------|
| 7 - 10,00000 | | | | |

| · Information on basic physical and | chemical properties |
|-------------------------------------|---|
| · General Information | |
| · Appearance: | |
| Form: | Fluid |
| Color: | Clear |
| · Odor: | Characteristic |
| · Odor threshold: | Not determined. |
| · pH-value at 20 °C: | 7.75 |
| · Change in condition | |
| Melting point/Melting range: | $0~^{\circ}C$ |
| Boiling point/Boiling range: | 100 °C |
| · 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. |

(Contd. on page 4)

Printing date 02/20/2024 Reviewed on 02/20/2024

Trade name: Anti-hCG\u03b3-Sm, stock solution

| | | (Contd. of page |
|-------------------------------------|--|-----------------|
| 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. | |
| Evaporation rate | Not determined. | |
| Solubility in / Miscibility with | | |
| Water: | Fully miscible. | |
| Partition coefficient (n-octanol/wo | ater): Not determined. | |
| Viscosity: | | |
| Dynamic at 20 °C: | 0.952 mPas | |
| Kinematic: | Not determined. | |
| Solvent content: | | |
| Water: | 98.0 % | |
| Solids content: | 0.9 % | |
| 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.

- C/

Printing date 02/20/2024 Reviewed on 02/20/2024

Trade name: Anti-hCG\u03b3-Sm, stock solution

(Contd. of page 4)

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: 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, 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 | of |
| MARPOL73/78 and the IBC Code | 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

(Contd. on page 6)

Reviewed on 02/20/2024 Printing date 02/20/2024

Trade name: Anti-hCG\beta-Sm, stock solution

| | | (Contd. of page |
|---------------|--|-----------------|
| · Section 313 | (Specific toxic chemical listings): | |
| 26628-22-8 | sodium azide | |
| · TSCA (Toxi | ic Substances Control Act): | |
| 7732-18-5 | water | ACTI |
| 7647-14-5 | sodium chloride | ACTI |
| 77-86-1 | trometamol | ACTI |
| 26628-22-8 | sodium azide | ACTI |
| · Canadian sı | ubstance listings: | |
| · Canadian D | omestic Substances List (DSL) | |
| 7732-18-5 | water | |
| 7647-14-5 | sodium chloride | |
| 77-86-1 | trometamol | |
| 26628-22-8 | sodium azide | |
| · Canadian N | on-Domestic Substances List (NDSL) | |
| None of the | ingredients is listed. | |
| · Canadian Iı | ngredient Disclosure list (limit 0.1%) | |
| None of the | ingredients is listed. | |
| · Canadian Iı | ngredient 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 02/20/2024
- · 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

* Data compared to the previous version altered.





Printing date 02/20/2024 Reviewed on 02/20/2024

1 Identification

- · Product identifier
- · Trade name: DELFIA-2 Buffer
- · Article number: 13802700
- · 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 02/20/2024 Reviewed on 02/20/2024

Trade name: DELFIA-2 Buffer

| | | (Contd. of page 1) |
|----------------|------------------------|--------------------|
| · Other ingred | lients | |
| 7732-18-5 | water | 90-100% w/w |
| 7647-14-5 | sodium chloride | <1% w/w |
| 9048-46-8 | Albumins, bovine serum | <1% w/w |
| | hydrogen chloride | <1% w/w |
| 26628-22-8 | sodium azide | <0.1% w/w |
| 9007-83-4 | Globulins | <0.1% w/w |
| 9005-64-5 | Polysorbate 20 | <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

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.

(Contd. on page 3)

Printing date 02/20/2024 Reviewed on 02/20/2024

Trade name: DELFIA-2 Buffer

(Contd. of page 2)

· 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:

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: Goggles recommended during refilling.

| | | <i>l properties</i> |
|-------------|-------------|---------------------|
| | | |
| 7 1 10 7 13 | CITCHILLECT | piopeitics |

| General Information | | |
|--------------------------------|---|--|
| Appearance: | | |
| Form: | Fluid | |
| Color: | Red | |
| Odor: | Characteristic | |
| Odor threshold: | Not determined. | |
| pH-value at 20°C: | 7.75 | |
| 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. | |

(Contd. on page 4)

Reviewed on 02/20/2024 Printing date 02/20/2024

Trade name: DELFIA-2 Buffer

| | | (Contd. of page |
|---------------------------------------|--|-----------------|
| Upper: | Not determined. | |
| · Vapor pressure at 20 °C: | 23 hPa | |
| · Density at 20 °C: | 1.01 g/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/wa | t ter): Not determined. | |
| · Viscosity: | | |
| Dynamic at 20 °C: | 0.952 mPas | |
| Kinematic: | Not determined. | |
| · Solvent content: | | |
| Water: | 97.5 % | |
| · 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) | |
|--|----------|
| 7647-01-0 hydrogen chloride | 3 |
| 915-67-3 trisodium 3-hydroxy-4-(4'-sulphonatonaphthylazo)naphthalene-2,7-disulph | ionate 3 |
| · NTP (National Toxicology Program) | |
| None of the ingredients is listed. | |

Printing date 02/20/2024 Reviewed on 02/20/2024

Trade name: DELFIA-2 Buffer

(Contd. of page 4)

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 \bar{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.

14 Transport information

| | T 73 | | | |
|---|------------|---------------|----|-----|
| ٠ | $U\Lambda$ | / - /V | um | her |

- · **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 of

MARPOL73/78 and the IBC Code 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):

7647-01-0 hydrogen chloride

26628-22-8 sodium azide

(Contd. on page 6)

Printing date 02/20/2024 Reviewed on 02/20/2024

Trade name: DELFIA-2 Buffer

| | | Contd. of page |
|---------------|--|----------------|
| · Section 313 | (Specific toxic chemical listings): | |
| 7647-01-0 | hydrogen chloride | |
| 26628-22-8 | sodium azide | |
| · TSCA (Toxi | ic Substances Control Act): | |
| 7732-18-5 | water | ACTIV |
| 7647-14-5 | sodium chloride | ACTIV |
| 9048-46-8 | Albumins, bovine serum | ACTIV |
| 7647-01-0 | hydrogen chloride | ACTIV |
| 26628-22-8 | sodium azide | ACTIV |
| 9005-64-5 | Polysorbate 20 | ACTIV |
| 1310-73-2 | sodium hydroxide | ACTIV |
| 915-67-3 | trisodium 3-hydroxy-4-(4'-sulphonatonaphthylazo)naphthalene-2,7-disulphonate | ACTIV |
| 67-43-6 | N-carboxymethyliminobis(ethylenenitrilo)tetra(acetic acid) | ACTIV |
| Canadian si | ubstance listings: | |
| Canadian D | omestic Substances List (DSL) | |
| 7732-18-5 | water | |
| 7647-14-5 | sodium chloride | |
| 9048-46-8 | Albumins, bovine serum | |
| 7647-01-0 | hydrogen chloride | |
| 26628-22-8 | sodium azide | |
| 9005-64-5 | Polysorbate 20 | |
| 1310-73-2 | sodium hydroxide | |
| 915-67-3 | trisodium 3-hydroxy-4-(4'-sulphonatonaphthylazo)naphthalene-2,7-disulphonate | |
| 67-43-6 | N-carboxymethyliminobis(ethylenenitrilo)tetra(acetic acid) | |

· 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 02/20/2024
- · 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)

(Contd. on page 7)

Printing date 02/20/2024 Reviewed on 02/20/2024

Trade name: DELFIA-2 Buffer

(Contd. of page 6)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative * Data compared to the previous version altered.