| 02/21/2024 | Kit Components |
|--------------|---|
| Product code | Description |
| AL3054HV | AlphaLISA Human HVEM Detection Kit (100 points) |
| Components: | |
| AL3054AHV | Anti-human HVEM Acceptor Beads |
| AL3054BHV | Anti-human HVEM Biotinylated Antibody |
| AL3054S | AlphaLISA Human HVEM |
| AL000HV | AlphaLISA Immunoassay Buffer 10X, 2 mL |

Streptavidin Donor Beads

6760002HV



Printing date 02/21/2024 Reviewed on 05/18/2023

1 Identification

- · Product identifier
- · Trade name: Anti-human HVEM Acceptor Beads
- · Product number: AL3054AHV, AL3054AC, AL3054AF
- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Revvity. Inc

549 Albany Street

Boston, MA 02118

· Information department:

US Technical Support

800-762-4000

· Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300

If outside USA, call CHEMTREC at 1-703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

Skin Irritation 2 H315 Causes skin irritation.

Eye Irritation 2A H319 Causes serious eye irritation.

Sensitization - Skin 1 H317 May cause an allergic skin reaction.

Aquatic Acute 2 H401 Toxic to aquatic life.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

· Additional information: For the wording of the listed H phrases refer to section 16.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS07

GHS09

- · Signal word Warning
- · Hazard-determining components of labeling:

5-chloro-2-methyl-2H-isothiazol-3-one

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Avoid release to the environment.

Wear protective gloves / eye protection / face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Wash contaminated clothing before reuse.

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

(Contd. on page 2)

(Contd. of page 1)

Safety Data Sheet acc. to OSHA HCS

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: Anti-human HVEM Acceptor Beads

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 2 Fire = 0 Reactivity = 0

3 Composition/information on ingredients

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

26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one

<0.1%

4 First-aid measures

- Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, 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: 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:** Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions:

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

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/surface or ground water.

· Methods and material for containment and cleaning up:

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

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

(Contd. on page 3)

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: Anti-human HVEM Acceptor Beads

(Contd. of page 2)

· 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.

Protective Action Criteria for Chemicals

| 1. o.eeu., e 1.eu., e | |
|--|----------------------|
| · PAC-1: | |
| 26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one | 0.6 mg/m^3 |
| 7778-77-0 potassium dihydrogenorthophosphate | 9.6 mg/m³ |
| · PAC-2: | |
| 26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one | 6.6 mg/m^3 |
| 7778-77-0 potassium dihydrogenorthophosphate | 110 mg/m^3 |
| · PAC-3: | |
| 26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one | 40 mg/m^3 |
| 7778-77-0 potassium dihydrogenorthophosphate | 630 mg/m^3 |
| | |

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: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Storage class: 8 B
- · 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.

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

Keep away from food and beverages.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Respiratory protection:

In case of brief or low exposure use an approved cartridge filter. In case of intensive or longer exposure use SCBA.

Suitable respiratory protective device recommended.

(Contd. on page 4)

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: Anti-human HVEM Acceptor Beads

· Protection of hands:





Protective gloves

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

9 Physical and chemical properties

| Information on basic physical and c | hemical properties |
|-------------------------------------|---|
| · Appearance: | |
| Form: | Fluid |
| Color: | Colorless |
| · Odor: | Odorless |
| Odor threshold: | Not determined. |
| · pH-value: | N/A |
| · Change in condition | |
| Melting point/Melting range: | 0 °C (32 °F) |
| Boiling point/Boiling range: | 100 °C (212 °F) |
| · 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 (68 °F): | 23 hPa (17.3 mm Hg) |
| Density at 20 °C (68 °F): | 1 g/cm³ (8.345 lbs/gal) |
| · Relative density | Not determined. |
| · Vapor density | Not determined. |
| · Evaporation rate | Not determined. |

(Contd. on page 5)

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: Anti-human HVEM Acceptor Beads

| | | (Contd. of page 4 |
|---|--|-------------------|
| · Solubility in / Miscibility with Water: | Not miscible or difficult to mix. | |
| · Partition coefficient (n-octanol/w | ater): Not determined. | |
| Viscosity: Dynamic at 20 °C (68 °F): Kinematic: | 0.952 mPas Not determined. | |
| Solvent content: Water: VOC content: | 99.0 % 0.00 % | |
| 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: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · 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)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

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

(Contd. on page 6)

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Trade name: Anti-human HVEM Acceptor Beads

(Contd. of page 5)

- · 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.
- · Ecotoxical effects: N/A · Remark: Toxic for fish
- · Other information: N/A
- 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. Must be specially treated adhering to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

| UN-Number | |
|------------------------------------|--|
| ADR, IMDG, IATA | UN1760 |
| · UN proper shipping name · ADR | 1760 CORROSIVE LIQUID, N.O.S. (CYANOGEN BROMIDI ENVIRONMENTALLY HAZARDOUS |
| · IMDG, IATA | CORROSIVE LIQUID, N.O.S. (CYANOGEN BROMIDE) |
| Transport hazard class(es) | |
| ADR | |
| | |
| Class | 8 Corrosive substances |
| Label | 8 |
| · IMDG, IATA | |
| | |
| Class | 8 Corrosive substances |
| Label | 8 |
| Packing group | |

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: Anti-human HVEM Acceptor Beads

| | (Contd. of page |
|--|---|
| Environmental hazards: Special marking (ADR): | Symbol (fish and tree) |
| Special precautions for user | Warning: Corrosive substances |
| Hazard identification number (Kemler code): | |
| EMS Number: | F-A,S-B |
| Stowage Category | A |
| Stowage Code | SW2 Clear of living quarters. |
| Transport in bulk according to Annex II of | |
| MARPOL73/78 and the IBC Code | Not applicable. |
| Transport/Additional information: | |
| Quantity limitations | On passenger aircraft/rail: 5 L |
| 2 . | On cargo aircraft only: 60 L |
| ADR | |
| Excepted quantities (EQ) | Code: E1 |
| | Maximum net quantity per inner packaging: 30 ml |
| | Maximum net quantity per outer packaging: 1000 ml |
| IMDG | |
| Limited quantities (LQ) | 5L |
| Excepted quantities (\widetilde{EQ}) | Code: E1 |
| | Maximum net quantity per inner packaging: 30 ml |
| | Maximum net quantity per outer packaging: 1000 ml |
| UN "Model Regulation": | UN 1760 CORROSIVE LIQUID, N.O.S. (CYANOGE |
| | BROMIDE), 8, III, ENVIRONMENTALLY HAZARDOUS |

15 Regulatory information

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

| 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): | |
| 7732-18-5 Water | ACTIV |
| 26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one | ACTIV |
| 7558-79-4 disodium hydrogenorthophosphate | ACTIV |
| 7778-77-0 potassium dihydrogenorthophosphate | ACTIV |
| 7447-40-7 potassium chloride | ACTIV |
| 7647-14-5 sodium chloride | ACTIVA |
| Hazardous Air Pollutants | |

(Contd. on page 8)

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: Anti-human HVEM Acceptor Beads

(Contd. of page 7)

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV (Threshold Limit Value)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

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

16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

- · Date of preparation / last revision 02/21/2024
- · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

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)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irritation 2: Skin corrosion/irritation - Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Sensitization - Skin 1: Skin sensitisation - Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard - Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

Printing date 02/21/2024 Reviewed on 05/18/2023

1 Identification

- · Product identifier
- · Trade name: Anti-human HVEM Biotinylated Antibody
- · Product number: AL3054BHV, AL3054BC, AL3054BF
- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Revvity, Inc 549 Albany Street Boston, MA 02118

· Information department:

US Technical Support

800-762-4000

· Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

The product has been classified and is not hazadous according to the Globally Harmonized System (GHS).

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



Health = 0 Fire = 0Reactivity = 0

3 Composition/information on ingredients

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

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: If skin irritation continues, consult a doctor.
- · 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.

(Contd. on page 2)

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Trade name: Anti-human HVEM Biotinylated Antibody

(Contd. of page 1)

· 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: Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions: Do not allow to enter sewers/surface or ground 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.

Protective Action Criteria for Chemicals

| PAC-1: | |
|--|------------------------|
| 7778-77-0 potassium dihydrogenorthophosphate | 9.6 mg/m^3 |
| 26628-22-8 sodium azide | 0.026 mg/m^2 |
| PAC-2: | |
| 7778-77-0 potassium dihydrogenorthophosphate | 110 mg/m³ |
| 26628-22-8 sodium azide | 0.29 mg/m |
| PAC-3: | |
| 7778-77-0 potassium dihydrogenorthophosphate | 630 mg/m |
| 26628-22-8 sodium azide | 5.3 mg/m^3 |

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 containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Storage class: 12
- · Specific end use(s) No further relevant information available.

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Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: Anti-human HVEM Biotinylated Antibody

(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.

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

The usual precautionary measures for handling chemicals should be followed.

- · Respiratory protection: Not required.
- · Protection of hands:

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

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 chemical proper | ties | |
|---|---|--|
| · Information on basic physical and c · General Information · Appearance: | chemical properties | |
| Form: | Fluid | |
| Color: | According to product specification | |
| · Odor: | Characteristic | |
| · Odor threshold: | Not determined. | |
| · pH-value: | N/A | |
| Change in condition Melting point/Melting range: Boiling point/Boiling range: | Undetermined. 100°C (212°F) | |
| · 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: Upper: | Not determined. Not determined. | |
| · Vapor pressure at 20 °C (68 °F): | 23 hPa (17.3 mm Hg) | |

(Contd. on page 4)

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: Anti-human HVEM Biotinylated Antibody

| | | (Contd. of page |
|---------------------------------------|--|-----------------|
| Density: | Not determined. | |
| · Relative density | Not determined. | |
| · Vapor density | Not determined. | |
| · Evaporation rate | Not determined. | |
| · Solubility in / Miscibility with | | |
| Water: | Not miscible or difficult to mix. | |
| · Partition coefficient (n-octanol/we | uter): Not determined. | |
| · Viscosity: | | |
| Dynamic: | Not determined. | |
| Kinematic: | Not determined. | |
| · Solvent content: | | |
| Water: | 93.7 % | |
| VOC content: | 0.00 % | |
| Solids content: | 3.2 % | |
| · 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:
- 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 | l Agency f | for Researci | h on Cancer) |
|--------|----------------|------------|--------------|--------------|
|--------|----------------|------------|--------------|--------------|

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

(Contd. on page 5)

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: Anti-human HVEM Biotinylated Antibody

(Contd. of page 4)

· OSHA-Ca (Occupational Safety & Health Administration)

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.
- · Ecotoxical effects: N/A
- · Other information: N/A
- 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. Must be specially treated adhering to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

| UN-Number | mat manulated | |
|---|-----------------|--|
| · ADR, ADN, IMDG, IATA | not regulated | |
| · UN proper shipping name · ADR, ADN, IMDG, IATA | not regulated | |
| Transport hazard class(es) | | |
| ADR, ADN, IMDG, IATA | | |
| Class | not regulated | |
| Packing group | | |
| ADR, IMDG, IATA | not regulated | |
| Environmental hazards: | Not applicable. | |
| Special precautions for user | Not applicable. | |
| Transport in bulk according to Anne. | x II of | |
| MARPOL73/78 and the IBC Code | Not applicable. | |
| · UN "Model Regulation": | not regulated | |

US ·

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: Anti-human HVEM Biotinylated Antibody

(Contd. of page 5)

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 (Toxi | TSCA (Toxic Substances Control Act): | | | | |
|--------------|--------------------------------------|--------|--|--|--|
| 7732-18-5 | Water | ACTIVE | | | |
| 7647-14-5 | sodium chloride | ACTIVE | | | |
| | disodium hydrogenorthophosphate | ACTIVE | | | |
| 7447-40-7 | potassium chloride | ACTIVE | | | |
| 7778-77-0 | potassium dihydrogenorthophosphate | ACTIVE | | | |
| | Polysorbate 20 | ACTIVE | | | |
| 26628-22-8 | sodium azide | ACTIVE | | | |

· Hazardous Air Pollutants

None of the ingredients is listed.

- Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

26628-22-8 sodium azide

A4

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

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

16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

(Contd. on page 7)

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: Anti-human HVEM Biotinylated Antibody

(Contd. of page 6)

· Contact:

· Date of preparation / last revision 02/21/2024

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

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) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

- US



Printing date 02/21/2024 Reviewed on 05/18/2023

1 Identification

· Product identifier

· Trade name: AlphaLISA Human HVEM

· Product number: AL3054S

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Revvity, Inc 549 Albany Street Boston, MA 02118

· Information department:

US Technical Support

800-762-4000

· Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

Skin Irritation 2 H315 Causes skin irritation.

Eye Irritation 2A H319 Causes serious eye irritation.

Sensitization - Skin 1 H317 May cause an allergic skin reaction.

Aquatic Acute 2 H401 Toxic to aquatic life.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

· Additional information: For the wording of the listed H phrases refer to section 16.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS07

S07 GHS09

- · Signal word Warning
- · Hazard-determining components of labeling:

5-chloro-2-methyl-2H-isothiazol-3-one

· Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Toxic to aquatic life with long lasting effects.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Avoid release to the environment.

Wear protective gloves / eye protection / face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Wash contaminated clothing before reuse.

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

(Contd. on page 2)

(Contd. of page 1)

Safety Data Sheet acc. to OSHA HCS

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: AlphaLISA Human HVEM

· Classification system:

· NFPA ratings (scale 0 - 4)



Health = 2 Fire = 0 Reactivity = 0

3 Composition/information on ingredients

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

26172-55-4 5-chloro-2-methyl-2H-isothiazol-3-one

<0.1%

4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, 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: 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:** Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions:

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

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/surface or ground water.

· Methods and material for containment and cleaning up:

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

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

(Contd. on page 3)

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: AlphaLISA Human HVEM

(Contd. of page 2)

· 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.

· Protective Action Criteria for Chemicals

| <i>PAC-1</i> : | | |
|----------------|---------------------------------------|-----------------------|
| 77-86-1 | TRIS | 18 mg/m³ |
| 7647-01-0 | hydrochloric acid | 1.8 ppm |
| 26172-55-4 | 5-chloro-2-methyl-2H-isothiazol-3-one | 0.6 mg/m |
| · PAC-2: | | |
| 77-86-1 | TRIS | 190 mg/m |
| 7647-01-0 | hydrochloric acid | 22 ppm |
| 26172-55-4 | 5-chloro-2-methyl-2H-isothiazol-3-one | 6.6 mg/m ² |
| · PAC-3: | | |
| 77-86-1 | TRIS | 1,200 mg/m |
| 7647-01-0 | hydrochloric acid | 100 ppm |
| 26172-55-4 | 5-chloro-2-methyl-2H-isothiazol-3-one | 40 mg/m^3 |

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: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Storage class: 8 B
- · 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.

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

Keep away from food and beverages.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

(Contd. on page 4)

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: AlphaLISA Human HVEM

· Respiratory protection:

(Contd. of page 3)

In case of brief or low exposure use an approved cartridge filter. In case of intensive or longer exposure use SCBA.

Suitable respiratory protective device recommended.

· Protection of hands:



Protective gloves

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

9 Physical and chemical properties

· Vapor pressure at 20 °C (68 °F):

| General Information | | |
|--------------------------------|---|--|
| Appearance: | | |
| Form: | Fluid | |
| Color: | According to product specification | |
| Odor: | Characteristic | |
| Odor threshold: | Not determined. | |
| pH-value: | N/A | |
| Change in condition | | |
| Melting point/Melting range: | Undetermined. | |
| Boiling point/Boiling range: | 100 °C (212 °F) | |
| 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. | |

23 hPa (17.3 mm Hg)

(Contd. on page 5)

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: AlphaLISA Human HVEM

| | | (Contd. of page |
|--------------------------------------|--|-----------------|
| · Density: | Not determined. | |
| · Relative density | Not determined. | |
| · Vapor density | Not determined. | |
| Evaporation rate | Not determined. | |
| · Solubility in / Miscibility with | | |
| Water: | Not miscible or difficult to mix. | |
| · Partition coefficient (n-octanol/w | nter): Not determined. | |
| · Viscosity: | | |
| Dynamic: | Not determined. | |
| Kinematic: | Not determined. | |
| · Solvent content: | | |
| Water: | 49.0 % | |
| VOC content: | 0.00 % | |
| Solids content: | 5.5 % | |
| · 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: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · 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) | |
|--|--------------------|
| 7647-01-0 hydrochloric acid | 3 |
| · NTP (National Toxicology Program) | |
| None of the ingredients is listed. | |
| | (Contd. on page 6) |

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Trade name: AlphaLISA Human HVEM

(Contd. of page 5)

· OSHA-Ca (Occupational Safety & Health Administration)

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.
- · Ecotoxical effects: N/A
- · Remark: Toxic for fish
- · Other information: N/A
- · 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. Must be specially treated adhering to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

| · UN-Number | |
|-------------|---------|
| ADD HADO | T 47T 4 |

· ADR, IMDG, IATA

· UN proper shipping name

· ADR 1760 CORROSIVE LIQUID, N.O.S. (CYANOGEN BROMIDE),

ENVIRONMENTALLY HAZARDOUS

· IMDG, IATA CORROSIVE LIQUID, N.O.S. (CYANOGEN BROMIDE)

UN1760

- · Transport hazard class(es)
- $\cdot ADR$



· Class 8 Corrosive substances

(Contd. on page 7)

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Trade name: AlphaLISA Human HVEM

| | (Contd. of page |
|---|---|
| Label | 8 |
| IMDG, IATA | |
| | |
| With the second | |
| | |
| Class | 8 Corrosive substances |
| Label | 8 |
| Packing group ADR, IMDG, IATA | III |
| | 111 |
| Environmental hazards: Special marking (ADR): | Symbol (fish and tree) |
| Special precautions for user | Warning: Corrosive substances |
| Hazard identification number (Kemler code): | |
| EMS Number: | F-A,S-B |
| Stowage Category | A SIVE SILVERS |
| Stowage Code | SW2 Clear of living quarters. |
| Transport in bulk according to Annex II of | N !! |
| MARPOL73/78 and the IBC Code | Not applicable. |
| Transport/Additional information: | 0 |
| Quantity limitations | On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L |
| | On cargo aircraft only. 00 L |
| ADR Excepted quantities (EQ) | Code: E1 |
| Excepted quantities (EQ) | Maximum net quantity per inner packaging: 30 ml |
| | Maximum net quantity per outer packaging: 1000 ml |
| IMDG | |
| Limited quantities (LQ) | 5L |
| Excepted quantities (EQ) | Code: E1 |
| | Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml |
| UN "Model Regulation": | UN 1760 CORROSIVE LIQUID, N.O.S. (CYANOGE |
| on moud Regulation . | BROMIDE), 8, III, ENVIRONMENTALLY HAZARDOUS |

15 Regulatory information

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

| · Section 3 | 55 (ext | remely h | azardous subs | stances): | | |
|-------------|---------|----------|---------------|-----------|--|--|
| | | | | | | |

7647-01-0 hydrochloric acid

· Section 313 (Specific toxic chemical listings):

7647-01-0 hydrochloric acid

· TSCA (Toxic Substances Control Act):

7732-18-5 Water

(Contd. on page 8)

ACTIVE

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: AlphaLISA Human HVEM

| | | (Contd. of pag |
|-------------|---|----------------|
| | 0 Dextran | ACTIV |
| 7647-14-3 | 5 sodium chloride | ACTIV |
| 77-86- | l TRIS | ACTIV |
| 9048-46-8 | 8 Bovine Serum Albumin | ACTIV |
| | hydrochloric acid | ACTIV |
| 26172-55-4 | 4 5-chloro-2-methyl-2H-isothiazol-3-one | ACTIV |
| Hazardous | s Air Pollutants | <u> </u> |
| 7647-01-0 | hydrochloric acid | |
| Proposition | n 65 | |
| Chemicals | known to cause cancer: | |
| None of the | e ingredients is listed. | |
| Chemicals | known to cause reproductive toxicity for females: | |
| None of the | e ingredients is listed. | |
| | known to cause reproductive toxicity for males: | |
| None of the | e ingredients is listed. | |
| Chemicals | known to cause developmental toxicity: | |
| None of the | e ingredients is listed. | |
| Carcinoge | nic categories | |
| EPA (Envi | ironmental Protection Agency) | |
| None of the | e ingredients is listed. | |
| TLV (Thre | shold Limit Value) | |
| 7647-01-0 | hydrochloric acid | F |
| | a (National Institute for Occupational Safety and Health) | |
| | e ingredients is listed. | |

16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

- · Contact:
- · Date of preparation / last revision 02/21/2024
- · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

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)

VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

(Contd. on page 9)

(Contd. of page 8)

Safety Data Sheet acc. to OSHA HCS

Reviewed on 05/18/2023 Printing date 02/21/2024

Trade name: AlphaLISA Human HVEM

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A Sensitization - Skin 1: Skin sensitisation – Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard - Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

Printing date 02/21/2024 Reviewed on 05/18/2023

1 Identification

- · Product identifier
- · Trade name: AlphaLISA Immunoassay Buffer 10X, 2 mL
- · Product number: AL000HV
- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Revvity. Inc 549 Albany Street Boston, MA 02118

· Information department:

US Technical Support

800-762-4000

· Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

Acute Toxicity - Inhalation 3 H331 Toxic if inhaled.

Skin Irritation 2 H315 Causes skin irritation.

Eye Irritation 2A H319 Causes serious eye irritation.

Sensitization - Skin 1 H317 May cause an allergic skin reaction.

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects. · Additional information: For the wording of the listed H phrases refer to section 16.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms







GHS06

GHS07

GHS09

- · Signal word Danger
- · Hazard-determining components of labeling:

5-chloro-2-methyl-2H-isothiazol-3-one

· Hazard statements

Toxic if inhaled.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

Very toxic to aquatic life with long lasting effects.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves / eye protection / face protection.

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.

(Contd. on page 2)

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: AlphaLISA Immunoassay Buffer 10X, 2 mL

(Contd. of page 1)

Wash contaminated clothing before reuse.

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

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



Health = 2 Fire = 0 Reactivity = 0

3 Composition/information on ingredients

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

| · Dangerous | components: | |
|-------------|---------------------------------------|---------|
| 9002-93-1 | Polyethylene glycol octylphenol ether | 2.5-10% |
| 26172-55-4 | 5-chloro-2-methyl-2H-isothiazol-3-one | <1% |

4 First-aid measures

- · Description of first aid measures
- General information:

Immediately remove any clothing soiled by the product.

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, 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: 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: Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions:

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

Inform respective authorities in case of seepage into water course or sewage system.

(Contd. on page 3)

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: AlphaLISA Immunoassay Buffer 10X, 2 mL

(Contd. of page 2)

Do not allow to enter sewers/surface or ground water.

· Methods and material for containment and cleaning up:

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

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.

· Protective Action Criteria for Chemicals

| · PAC-1: | | |
|------------|---------------------------------------|-------------------------|
| 7365-45-9 | HEPES Free Acid | 30 mg/m^3 |
| 26172-55-4 | 5-chloro-2-methyl-2H-isothiazol-3-one | 0.6 mg/m^3 |
| 77-86-1 | TRIS | 18 mg/m³ |
| · PAC-2: | | |
| 7365-45-9 | HEPES Free Acid | 330 mg/m ³ |
| 26172-55-4 | 5-chloro-2-methyl-2H-isothiazol-3-one | 6.6 mg/m^3 |
| 77-86-1 | TRIS | 190 mg/m³ |
| · PAC-3: | | |
| 7365-45-9 | HEPES Free Acid | $2,000 \text{ mg/m}^3$ |
| 26172-55-4 | 5-chloro-2-methyl-2H-isothiazol-3-one | 40 mg/m^3 |
| 77-86-1 | TRIS | 1,200 mg/m ³ |

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Storage class: 6.1 D
- · 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.

(Contd. on page 4)

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: AlphaLISA Immunoassay Buffer 10X, 2 mL

(Contd. of page 3)

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

Keep away from food and beverages.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Respiratory protection:

In case of brief or low exposure use an approved cartridge filter. In case of intensive or longer exposure use SCBA.

Suitable respiratory protective device recommended.

· Protection of hands:



Protective gloves

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

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Fluid

Color: According to product specification

Odor: CharacteristicOdor threshold: Not determined.

· pH-value: N/A

· Change in condition

Melting point/Melting range:Undetermined.Boiling point/Boiling range:100 °C (212 °F)

Flash point: Not applicable.

· Flammability (solid, gaseous): Not applicable.

• **Decomposition temperature:** Not determined.

(Contd. on page 5)

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: AlphaLISA Immunoassay Buffer 10X, 2 mL

| | | (Contd. of page |
|---|---|-----------------|
| · 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 (68 °F): | 23 hPa (17.3 mm Hg) | |
| · Density: | Not determined. | |
| Relative density | Not determined. | |
| · Vapor density | Not determined. | |
| Evaporation rate | Not determined. | |
| · Solubility in / Miscibility with | | |
| Water: | Not miscible or difficult to mix. | |
| · Partition coefficient (n-octanol/wate | er): Not determined. | |
| · Viscosity: | | |
| Dynamic: | Not determined. | |
| Kinematic: | Not determined. | |
| · Solvent content: | | |
| Water: | 85.4 % | |
| VOC content: | 0.00 % | |
| Solids content: | 0.4 % | |
| · 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: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

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

Irritant

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Trade name: AlphaLISA Immunoassay Buffer 10X, 2 mL

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· 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.

OSHA-Ca (Occupational Safety & Health Administration)

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.
- · Ecotoxical effects: N/A
- · Remark: Very toxic for fish
- · Other information: N/A
- · 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 be specially treated adhering to official regulations.

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

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

| · UN-Number · ADR, IMDG, IATA | UN2810 |
|----------------------------------|--|
| | 0112010 |
| · UN proper shipping name | |
| $\cdot ADR$ | 2810 TOXIC LIQUID, ORGANIC, N.O.S. (CYANOGE. |
| | BROMIDE), ENVIRONMENTALLY HAZARDOUS |
| \cdot IMDG | TOXIC LIQUID, ORGANIC, N.O.S. (CYANOGEN BROMIDE |
| | MARINE POLLUTANT |
| · IATA | TOXIC LIQUID, ORGANIC, N.O.S. (CYANOGEN BROMIDE) |

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Trade name: AlphaLISA Immunoassay Buffer 10X, 2 mL

| | (Contd. of page |
|---|---|
| Transport hazard class(es) | |
| ADR, IMDG | |
| (**) ********************************** | |
| Class | 6.1 Toxic substances |
| Label | 6.1 |
| IATA | |
| | |
| Class | 6.1 Toxic substances |
| Label | 6.1 |
| Packing group | |
| ADR, IMDG, IATA | III |
| Environmental hazards: | Product contains environmentally hazardous substances: chloro-2-methyl-2H-isothiazol-3-one |
| Marine pollutant: | Symbol (fish and tree) |
| Special marking (ADR): | Symbol (fish and tree) |
| Special precautions for user Hazard identification number (Kemler code) EMS Number: | Warning: Toxic substances): 60 F-A,S-A |
| Segregation groups | (SGG6) Cyanides |
| Stowage Category | A |
| Stowage Code | SW2 Clear of living quarters. |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| Transport/Additional information: | |
| Quantity limitations | On passenger aircraft/rail: 60 L |
| | On cargo aircraft only: 220 L |
| ADR | |
| Excepted quantities (EQ) | Code: E1 Maximum net quantity per inner packaging: 30 ml |
| | Maximum net quantity per inner packaging. 30 ml Maximum net quantity per outer packaging: 1000 ml |
| IMDG | 1 /1 |
| Limited quantities (LQ) | 5L |
| Excepted quantities (EQ) | Code: E1 |
| | Maximum net quantity per inner packaging: 30 ml |
| | Maximum net quantity per outer packaging: 1000 ml |
| UN "Model Regulation": | UN 2810 TOXIC LIQUID, ORGANIC, N.O.S. (CYANOGE BROMIDE), 6.1, III, ENVIRONMENTALLY HAZARDOUS |

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: AlphaLISA Immunoassay Buffer 10X, 2 mL

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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):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

None of the ingredients is listed.

- Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic categories
- EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

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

16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

- · Contact.
- · Date of preparation / last revision 02/21/2024
- · Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

 $DOT: \ US \ Department \ of \ Transportation$

IATA: International Air Transport Association

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Safety Data Sheet acc. to OSHA HCS

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Trade name: AlphaLISA Immunoassay Buffer 10X, 2 mL

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) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Toxicity - Inhalation 3: Acute toxicity - Category 3 Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Sensitization - Skin 1: Skin sensitisation - Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1

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1 Identification

- · Product identifier
- Trade name: Streptavidin Donor Beads
- · Product number: 6760002HV
- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Revvity, Inc 549 Albany Street Boston, MA 02118

· Information department:

US Technical Support 800-762-4000

· Emergency telephone number:

If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture

The product has been classified and is not hazadous according to the Globally Harmonized System (GHS).

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



Health = 0 Fire = 0Reactivity = 0

3 Composition/information on ingredients

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

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: If skin irritation continues, consult a doctor.
- · 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.

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Trade name: Streptavidin Donor Beads

(Contd. of page 1)

· 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: Wear self-contained respiratory protective device.

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:

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.

Protective Action Criteria for Chemicals

| • PAC-1: | | |
|-----------|-----------------|------------------------|
| 9003-53-6 | POLYSTYRENE | 85 mg/m^3 |
| 7365-45-9 | HEPES Free Acid | 30 mg/m^3 |
| • PAC-2: | | |
| 9003-53-6 | POLYSTYRENE | 550 mg/m^3 |
| 7365-45-9 | HEPES Free Acid | 330 mg/m^3 |
| • PAC-3: | | |
| 9003-53-6 | POLYSTYRENE | $4,700 \text{ mg/m}^3$ |
| 7365-45-9 | HEPES Free Acid | $2,000 \text{ mg/m}^3$ |

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 containers: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- · Storage class: 12
- · Specific end use(s) No further relevant information available.

LIS

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Trade name: Streptavidin Donor Beads

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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.

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

The usual precautionary measures for handling chemicals should be followed.

- · Respiratory protection: Not required.
- Protection of hands:

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

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

· Vapor pressure at 20 °C (68 °F):

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.

| Information on basic physical and | chemical properties | |
|--|---|--|
| · General Information · Appearance: | | |
| Form: | Fluid | |
| Color: | According to product specification | |
| Odor: | Characteristic | |
| Odor threshold: | Not determined. | |
| pH-value: | N/A | |
| Change in condition | | |
| Melting point/Melting range: | 0 °C (32 °F) | |
| Boiling point/Boiling range: | 100 °C (212 °F) | |
| 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. | |

23 hPa (17.3 mm Hg)

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| | | (Contd. of page |
|---------------------------------------|--|-----------------|
| Density at 20 °C (68 °F): | 1 g/cm³ (8.345 lbs/gal) | |
| · Relative density | Not determined. | |
| · Vapor density | Not determined. | |
| · Evaporation rate | Not determined. | |
| · Solubility in / Miscibility with | | |
| Water: | Not miscible or difficult to mix. | |
| · Partition coefficient (n-octanol/we | nter): Not determined. | |
| · Viscosity: | | |
| Dynamic: | Not determined. | |
| Kinematic: | Not determined. | |
| · Solvent content: | | |
| Water: | 97.5 % | |
| VOC content: | 0.00 % | |
| Solids content: | 0.2 % | |
| · 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:
- 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) |
|--|
| 9003-53-6 POLYSTYRENE 3 |
| · NTP (National Toxicology Program) |
| None of the ingredients is listed. |

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· OSHA-Ca (Occupational Safety & Health Administration)

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.
- · Ecotoxical effects: N/A
- · Other information: N/A
- 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. Must be specially treated adhering to official regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

| UN-Number | | |
|--|-----------------|--|
| ADR, IMDG, IATA | not regulated | |
| UN proper shipping name ADR, IMDG, IATA | not regulated | |
| Transport hazard class(es) | | |
| ADR, ADN, IMDG, IATA | | |
| Class | not regulated | |
| Packing group | | |
| ADR, IMDG, IATA | not regulated | |
| Environmental hazards: | Not applicable. | |
| 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": | not regulated | |

US -

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Trade name: Streptavidin Donor Beads

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15 Regulatory information

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

| · Section 355 (extrem | nely hazara | lous sul | bstances) |): |
|-----------------------|-------------|----------|-----------|----|
|-----------------------|-------------|----------|-----------|----|

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

| | ······································ | |
|-----------|--|--------|
| 7732-18-5 | Water | ACTIVE |
| 9003-53-6 | POLYSTYRENE | ACTIVE |
| 7365-45-9 | HEPES Free Acid | ACTIVE |
| 7647-14-5 | sodium chloride | ACTIVE |

· Hazardous Air Pollutants

None of the ingredients is listed.

- Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

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

16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

- · Contact:
- Date of preparation / last revision 02/21/2024

(Contd. on page 7)

Printing date 02/21/2024 Reviewed on 05/18/2023

Trade name: Streptavidin Donor Beads

(Contd. of page 6)

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International

Carriage of Dangerous Goods by Road)

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) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit