

according to Regulation (EC) No 1907/2006 (REACH)

Trade name: HSA kit - 500 tests / 6FHSAPEG Version: KIT, Page 1 of 1, Revision date: 24/10/2023

Cette section présente les différents flacons présents dans le kit. Les fiches de sécurité de tous ces composants sont disponibles dans la langue choisie à la suite du document.

This section shows all the vials in the kit. The Safety Datasheets are available in the selected language in the next part of the document.

Nomenclature of the product

| Description | Component | Nb of vials | рН | Color | Physical state |
|------------------|-----------|-------------|----|-----------|----------------|
| Conjugate Buffer | | 1 | 7 | Colorless | Liquid |
| Diluent | | 1 | 7 | Colorless | Liquid |
| Anti-HSA -K | | 1 | 7 | Colorless | Liquid |
| Anti-HSA -d2 | | 1 | 7 | Colorless | Liquid |
| HSA Standard | | 1 | 7 | Colorless | Liquid |



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Conjugate Buffer Version: US, Page 1 of 12, Revision date: 07/09/2023

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

1.1 Product identifier:

Designation / Trade name:Conjugate BufferCAS No.:Index No:EC No:REACH No:

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

Relevant identified uses: Use of the substance or mixture for Laboratory Research use only ; Uses advised against: Do not use for diagnostics, therapeutics or other clinical uses. ;

1.3 Details of the supplier of the safety data sheet:

Supplier: Name: CISBIO BIOASSAYS, company of Revvity Group - CBBIOA -Address: Parc Marcel Boiteux - BP 84175 - 30200 Codolet, France Phone : +33 4 66 79 67 05 - Fax : +33 4 66 79 67 50 E-Mail (competent person): codolet.sds@revvity.com

1.4 EMERGENCY TELEPHONE NUMBER:

France - Numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59 Ce numéro permet d'obtenir les coordonnées de tous les centres Anti-poison Français. Ces centres anti-poison et de toxicovigilance fournissent une aide médicale gratuite (hors coût d'appel), 24 heures sur 24 et 7 jours sur 7.

USA & Canada - Phone: 1-888-963-456 (1) Other countries - Phone: +33 (0) 466 796 737 (2) https://www.cisbio.com https://www.revvity.com (1) Available from Monday to Thursday 8:30 am to 5:30pm GMT-5 and Friday: 8:30 am to 3:00pm GMT-5 (2) Available from Monday to Friday 9:00 am to 5:30 pm GMT+2

SECTION 2 : HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

| Classification in accordance with 29 CFR 1910 (OSHA HCS) | Category code | Hazard statement | Precautionary statement |
|---|---------------|------------------|----------------------------|
| Acute toxicity - Acute Tox. 4 - H332 - Inhalation | Acute Tox. 4 | H332 | P261 P271 P304 + P340 P312 |

2.2 Label elements

Labelling according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

<u>Product identifier:</u> Designation / Trade name: Conjugate Buffer

Substances contained in this product:



Designation / Trade name: Conjugate Buffer Version: US, Page 2 of 12, Revision date: 07/09/2023

| | | | v |
|--------------------|-----------|--------------|-----------|
| Substance name | CAS n° | Index n° | EC n° |
| potassium fluoride | 7789-23-3 | 009-005-00-2 | 232-151-5 |

Hazard pictograms GHS07-exclam



Signal word: Warning

Hazard and precautionary statements:

| Code | Hazard statments |
|-------------|--|
| H332 | Harmful if inhaled |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P312 | Call a POISON CENTRE/doctor/ if you feel unwell. |

2.3 Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH. The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006. ;

Adverse human health effects:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Conjugate Buffer Version: US, Page 3 of 12, Revision date: 07/09/2023

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous ingredients:

| Substance name | CAS n° | Index n° | EC n° | Classification in accordance with 29 CFR 1910 (OSHA HCS) | Concentration (%) | SCL | M-factor |
|---------------------------------------|-----------|--------------|-----------|--|----------------------|-----|----------|
| potassium fluoride | 7789-23-3 | 009-005-00-2 | 232-151-5 | Acute toxicity - Acute Tox. 3 - H301 - Oral Acute toxicity - Acute Tox. 3 - H311 - Dermal Acute toxicity - Acute Tox. 3 - H331 - Inhalation | < 10% | | |
| potassium dihydrogenorthophosphate | 7778-77-0 | | 231-913-4 | | < 1% | | |

Additional information:

Full text of H- and EUH-phrases: see SECTION 16.

SECTION 4 : FIRST AID MEASURES

4.1 Description of first aid measures

General information: Do not leave affected person unattended.;
Following inhalation: In case of respiratory tract irritation, consult a physician.;
Following skin contact: After contact with skin, wash immediately with water;
Following eye contact: After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.;
Following ingestion: Do NOT induce vomiting.;
Self-protection of the first aider:

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No known symptoms to date. ; Effects:

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

SECTION 5 : FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media: This product is not flammable. Use extinguishing agent suitable for type of surrounding fire ;

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: /

5.3 Advice for fire-fighters

Wear Protective clothing. ; Additional information:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Conjugate Buffer Version: US, Page 4 of 12, Revision date: 07/09/2023

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Emergency procedures: Provide adequate ventilation. ;

6.2 Environmental precautions

Do not allow to enter into surface water or drains. ;

6.3 Methods and material for containment and cleaning up

For cleaning up: Suitable material for taking up: Absorbing material, organic ; Other information:

6.4 Reference to other sections

Additional information:

SECTION 7 : HANDLING AND STORAGE

7.1 Precautions for safe handling

<u>Protective measures:</u> Advice on safe handling: Avoid contact with skin, eyes and clothes. ; Fire preventions:

Do not eat, drink or smoke in areas where reagents are handled. ; <u>Advice on general occupational hygiene</u>: Handle in accordance with good industrial hygiene and safety practice ;

7.2 Conditions for safe storage, including any incompatibilities

<u>Requirements for storage rooms and vessels</u>: Keep container tightly closed. ; <u>Hints on storage assembly:</u> Materials to avoid: <u>Further information on storage conditions:</u>

7.3 Specific end uses:

Recommendations on specific end uses: Observe technical data sheet. ;

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Preliminary remark:

8.1.1 Occupational exposure limits:

• OSHA (USA)



Designation / Trade name: Conjugate Buffer Version: US, Page 5 of 12, Revision date: 07/09/2023

| Source : | Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELS) from 29 CFR 1910.1000 | | | | | | | | | |
|---------------------------|---|-----------|--|---|--|--|--|--|--|--|
| Substance | EC-No. | CAS-No | OSHA Permissible Exposure Limit (PEL) 8-hour TWA (ppm) | OSHA Permissible Exposure Limit (PEL) 8- hour TWA (mg/m3) | OSHA Permissible Exposure Limit (PEL) STEL (ppm) | OSHA Permissible Exposure Limit (PEL) STEL (mg/m3) | | | | |
| 7778-77-0 / 231-913- 4 | | 7778-77-0 | | | | | | | | |
| 7789-23-3 / 232-151- 5 | 232-151-5 | 7789-23-3 | | | | | | | | |

| Source : | TRGS 903, November 2015, BAuA | | | | | | | | | | |
|---------------------------|-------------------------------|-----------|-------------|-----------|--|--|--|--|--|--|--|
| Substance | EC-No. | CAS-No | BGW (mg/m3) | BGW (ppm) | | | | | | | |
| 7778-77-0 / 231-913- 4 | | 7778-77-0 | | | | | | | | | |
| 7789-23-3 / 232-151- 5 | 232-151-5 | 7789-23-3 | | | | | | | | | |

8.1.2 <u>DNEL/PNEC-values:</u>

• DNEL worker

| Source : | GESTIS – su | bstance dat | abase | | | | | | |
|--------------------------|-------------|-------------|---|--|---|-----|------------------|---|------------------|
| Substance | EC-No. | CAS-No | Acute – dermal, local effects (mg/kg/day) | | Long-term – dermal, systemic effects (mg/kg/day) | | systemic etterts | Long-term – inhalation, local effects (mg/m3) | systemic etterts |
| 7778-77-0/ 231-913-4 | 231-913-4 | 7778-77-0 | | | | | 4.07-4.07 | | |
| 7789-23-3 / 232-151-5 | 232-151-5 | 7789-23-3 | | | | 3-3 | 3-3 | | |

• DNEL consumer

| Source : | GESTIS – si | ubstance da | tabase | | | | | | |
|--------------------------|-------------|-------------|---|--|---|---|------------------|---|------------------|
| Substance | EC-No. | CAS-No | Acute – dermal, local effects (mg/kg/day) | Long-term – dermal, local effects (mg/kg/day) | Long-term – dermal, systemic effects (mg/kg/day) | Acute – inhalation, local effects (mg/m3) | systemic ettects | Long-term – inhalation, local effects (mg/m3) | systemic effects |
| 7778-77-0/ 231-913-4 | 231-913-4 | 7778-77-0 | | | | | | | |
| 7789-23-3 / 232-151-5 | 232-151-5 | 7789-23-3 | | | | | | | |

PNEC

| Source : | INERIS | | | | | | |
|-----------|---------|---------|------------|--------------|----------------------|------------|--------------|
| Cubatanaa | EC-No. | CAS-No | | PNEC AQUATIC | | PNEC Se | ediment |
| Substance | EC-INO. | CAS-INO | freshwater | marine water | intermittent release | freshwater | marine water |



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| | | | | | | | | | | | | | | | | ~ | / |
|------------------------------|-----------|-----------|--------|---------|-------|--------|---------|-------|--------|---------|-------|--------|---------|-------|--------|---------|-------|
| | | | (mg/L) | (mg/kg) | (ppm) |
| 7778-77-0 / 231-913- 4 | 231-913-4 | 7778-77-0 | | | | | | | | | | | | | | | |
| 7789-23-3 / 232-151- 5 | 232-151-5 | 7789-23-3 | | | | | | | | | | | | | | | |

| Source : | INERIS | | | | | | | | | | | | | |
|--------------------------|-----------|---------------------------------|--------|--------------------------------|-------|----------|---------|-------|-----------------------------|---------|-------|--------|---------|-------|
| | | | | | | | | Oth | ers | | | | | |
| Substance | EC-No. | EC-No. CAS-No PNEC soil PNEC se | | PNEC sewage treatment plant | | PNEC air | | | PNEC secondary poisoning | | | | | |
| | | | (mg/L) | (mg/kg) | (ppm) | (mg/L) | (mg/kg) | (ppm) | (mg/L) | (mg/kg) | (ppm) | (mg/L) | (mg/kg) | (ppm) |
| 7778-77-0 / 231-913-4 | 231-913-4 | 7778-77-0 | | | | | | | | | | | | |
| 7789-23-3 / 232-151-5 | 232-151-5 | 7789-23-3 | | | | | | | | | | | | |

8.2 Exposure controls

8.2.1 <u>Appropriate engineering controls:</u>

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7

8.2.2 <u>Personal protective equipment:</u>

Eye / Face protection: Safety glasses with side-shields ;

Skin protection:Gloves ;

Respiratory protection:Ensure adequate ventilation ;

Thermal hazards:

8.2.3 Environmental exposure controls:

Consumer exposure control

Measures related to consumer uses of the substance (as such or in mixtures): Measures related to the service life of the substance in articles:

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

| Appearance | |
|-----------------------|-------------|
| Physical state | Liquid ; |
| Colour | Colorless ; |
| Odour | |
| Odour threshold (ppm) | |

| | | Concentration (mol/L) | Method | Temperature (°C) | Pressure (kPa) | Remark |
|--|---|--------------------------|--------|------------------|----------------|--------|
| рН | 7 | | | | | |
| Melting point (°C) | | | | | | |
| Freezing point (°C) | | | | | | |
| Initial boiling point/boiling range (°C) | | | | | | |
| Flash point (°C) | | | | | | |



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| | | | | | v |
|---|---|----------------------------|--|--|---|
| Evaporation rate | (kg/m²/h) | | | | |
| Flammability (type :) (%) | | | | | |
| Upper/lower flammability or explosive | | per explosive limit (%) | | | |
| limits | Lowe | er explosive limit (%) | | | |
| Vapour pressure | (kPa) | | | | |
| Vapour density (| g/cm³) | | | | |
| | Density (g/ | ′cm³) | | | |
| Densities | s Relative de | ensity (g/cm³) | | | |
| | Bulk densit | ty (g/cm³) | | | |
| | Critical der | nsity (g/cm³) | | | |
| Solubility (Type:) (g/L) | | | | | |
| Partition coefficien n-octanol/water | | | | | |
| Auto-ignition ten | nperature (°C) | | | | |
| Decomposition temperature (°C) Decomposition energy : kJ | | | | | |
| Viscosity | Viscosity, dy | namic (poiseuille) | | | |
| | Viscosity, cinematic (cm ³ /s) | | | | |
| | Explosive proper | rties | | | |
| | Oxidising proper | ties | | | |

9.2 Other information:

No other relevant data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

This material is considered to be non-reactive under normal use conditions. ;

10.2 Chemical stability

10.3 Possibility of hazardous reactions

- 10.4 Conditions to avoid:
- 10.5 Incompatible materials:

10.6 Hazardous decomposition products:

Does not decompose when used for intended uses. ;

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution

11.1 Information on toxicological effects

Substances

Acute toxicity



Designation / Trade name: Conjugate Buffer Version: US, Page 8 of 12, Revision date: 07/09/2023

Animal data:

Acute oral toxicity:

| Substance name | LD50 (mg/kg) | Species | Method | Symptoms / delayed effects | Remark |
|-----------------------|-----------------|---------|--------|----------------------------|--------|
| 7789-23-3 / 232-151-5 | 245-245 | Rat | | | |

Acute dermal toxicity:

| Substance name | LD50 (mg/kg) | Species | Method | Remark |
|-----------------------|--------------|---------|--------|--------|
| 7789-23-3 / 232-151-5 | | | | |

Acute inhalative toxicity:

| Substance name | C(E)L50 (mg/L) | Exposure time | Species | Method | Remark |
|-----------------------|-------------------|---------------|---------|--------|--------|
| 7789-23-3 / 232-151-5 | | | | | |

Practical experience / human evidence: Assessment / Classification: General Remark:

• Skin corrosion/irritation

Animal data:

In-vitro skin test method: In-vitro skin test result:

Assessment / Classification:

• Eye damage/irritation

Animal data:

In vitro eye test method: In vitro eye test result: Assessment / Classification:

- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
 - Germ cell mutagenicity:

Animal data:

•

Assessment / Classification:

o Carcinogenicity

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Conjugate Buffer Version: US, Page 9 of 12, Revision date: 07/09/2023

Practical experience / human evidence: Animal data:

Other information: Assessment / Classification:

o Reproductive toxicity

Practical experience / human evidence: Animal data:

Other information: Assessment / Classification:

Overall assessment on CMR properties:

• Specific target organ toxicity (single exposure)

 $\circ~$ STOT SE 1 and 2

Animal data:

Other information:

O STOT SE 3

Practical experience / human evidence:

Other information: Assessment / Classification:

• Specific target organ toxicity (repeated exposure)

Practical experience / human evidence: Animal data:

Assessment / Classification: Other information

Aspiration hazard

Practical experience / human evidence: Experimental data: viscosity data: see SECTION 9. Assessment / Classification: Remark:

11.1.1 <u>Mixtures</u> No toxicological information is available for the mixture itself

SECTION 12 : ECOLOGICAL INFORMATION

In case that test data regarding one endpoint/differentiation exist for the mixture itself, the classification is carried out according to the substance criteria (excluding biodegradation and bioaccumulation). If no test data exist, the criteria for

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Conjugate Buffer Version: US, Page 10 of 12, Revision date: 07/09/2023

mixture classification has to be used (calculation method) data of the ingredients are shown.

12.1 Aquatic toxicity:

Acute (short-term) fish toxicity

Chronic (long-term) fish toxicity

Acute (short-term) toxicity to crustacea

Chronic (long-term) toxicity to crustacea

Acute (short-term) toxicity to algae and cyanobacteria

Toxicity to microorganisms and other aquatic plants / organisms

Assessment / Classification:

12.2 Persistence and degradability

Biodegradation:

Abiotic Degradation:

Assessment / Classification:

12.3 Bioaccumulative potential

Bioconcentration factor (BCF):

12.4 Mobility in soil

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects:

Additional ecotoxicological information:

SECTION 13 : DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste treatment options: Dispose of waste according to applicable legislation. ;

Other disposal recommendations: Additional information: in this case the toxicological

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

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SECTION 14 : TRANSPORT INFORMATION

ADR/RID/AND/IMDG/IATA

| UN No. | |
|----------------------------|--|
| UN Proper shipping name | |
| Transport hazard class(es) | |
| Hazard label(s) | |
| | |
| Packing group | |

blue cones/lights:

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

| Land transport (ADR/RID) | |
|---|---|
| Classification code ADR: Special Pr | rovisions for ADR/RID: |
| Limited quantities for ADR/RID: Excepted | Quantities for ADR/RID: |
| Packing Instructions for ADR/RID: | |
| Special packing provisions for ADR/RID: | |
| Mixed packing provisions: Portable | tanks and bulk containers Instructions: |
| Portable tanks and bulk containers Special Provisions: | |
| ADR Tank Code: ADR Tank | special provisions: |
| Vehicle for tank carriage: Special p | rovisions for carriage Packages: |
| Special provisions for carriage Bulk: | |
| Special provisions for carriage for loading, unloading and hand | lling: |
| Special Provisions for carriage Operation: | |
| Hazard identification No: Transport | t category (Tunnel restriction code): |

| Sea transport (IMDG) | |
|--------------------------------|-----------------------------------|
| Marine Pollutant: | Subsidiary risk(s) for IMDG: |
| Packing provisions for IMDG: | Limited quantities for IMDG: |
| Packing instructions for IMDG: | IBC Instructions: |
| IBC Provisions: | IMO tank instructions: |
| UN tank instructions: | Tanks and bulk Provisions: |
| EmS : | Stowage and segregation for IMDG: |
| Properties and observations: | |

Inland waterway transport (ADN) Classification Code ADN

| Special Provisions ADN: |
|---------------------------|
| Excepted quantities ADN: |
| Equipment required: |
| |
| Number of blue cones/ligh |
| |
| |

Air transport (ICAO-TI / IATA-DGR)

Subsidiary risk for IATA: Excepted quantity for IATA: Passenger and Cargo Aircraft Limited Quantities Packing Instructions: Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity : Passenger and Cargo Aircraft Packaging Instructions : Passenger and Cargo Aircraft Maximal Net Quantity : Cargo Aircraft only Packaging Instructions : Cargo Aircraft only Maximal Net Quantity : ERG code: Special Provisions for IATA:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

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SECTION 15 : REGULATORY INFORMATION

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

15.2 Chemical Safety Assessment:

For the following substances of this mixture a chemical safety assessment has been carried out :

SECTION 16 : OTHER INFORMATION

16.1 Indication of changes

Date of the previous version:06/09/2023 Modifications:

16.2 Abbreviations and acronyms:

16.3 Key literature references and sources for data

16.4 Classification for mixtures and used evaluation method according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g):

See SECTION 2.1 (classification).

16.5 Relevant R-, H- and EUH-phrases (number and full text):

| Code | Hazard statments |
|------|----------------------------|
| H301 | Toxic if swallowed |
| H311 | Toxic in contact with skin |
| H331 | Toxic if inhaled |



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Diluent Version: US, Page 1 of 11, Revision date: 07/09/2023

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

1.1 Product identifier:

| Designation / | Trade name: | Diluent | | |
|---------------|-------------|---------|--------|-----------|
| CAS No.: | Index No |): | EC No: | REACH No: |

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

Relevant identified uses: Use of the substance or mixture for Laboratory Research use only ; Uses advised against: Do not use for diagnostics, therapeutics or other clinical uses. ;

1.3 Details of the supplier of the safety data sheet:

Supplier: Name: CISBIO BIOASSAYS, company of Revvity Group - CBBIOA -Address: Parc Marcel Boiteux - BP 84175 - 30200 Codolet, France Phone : +33 4 66 79 67 05 - Fax : +33 4 66 79 67 50 E-Mail (competent person): codolet.sds@revvity.com

1.4 EMERGENCY TELEPHONE NUMBER:

France - Numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59 Ce numéro permet d'obtenir les coordonnées de tous les centres Anti-poison Français. Ces centres anti-poison et de toxicovigilance fournissent une aide médicale gratuite (hors coût d'appel), 24 heures sur 24 et 7 jours sur 7.

USA & Canada - Phone: 1-888-963-456 (1) Other countries - Phone: +33 (0) 466 796 737 (2) https://www.cisbio.com https://www.revvity.com (1) Available from Monday to Thursday 8:30 am to 5:30pm GMT-5 and Friday: 8:30 am to 3:00pm GMT-5 (2) Available from Monday to Friday 9:00 am to 5:30 pm GMT+2

SECTION 2 : HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

| Classification in accordance with 29 CFR 1910 (OSHA HCS) | Category code | Hazard statement | Precautionary statement |
|---|---------------|------------------|-------------------------|
| The substance or mixture is not classified as hazardous in accordance with 29 CFR 1910 (OSHA HCS) | None | None | None |

2.2 Label elements

Labelling according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

<u>Product identifier:</u> Designation / Trade name: Diluent

Substances contained in this product:



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Hazard pictograms

Signal word:

Hazard and precautionary statements:

2.3 Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH. The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006. ;

Adverse human health effects:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Diluent Version: US, Page 3 of 11, Revision date: 07/09/2023

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous ingredients:

| Substance name | CAS n° | Index n° | EC n° | Classification in accordance with 29 CFR 1910 (OSHA HCS) | Concentration (%) | SCL | M-factor |
|----------------|---------|--------------|-----------|---|----------------------|-----|----------|
| ethanol | 64-17-5 | 603-002-00-5 | 200-578-6 | Flammable liquid - Flam. Liq. 2 - H225 | < 1% | | |

Additional information:

Full text of H- and EUH-phrases: see SECTION 16.

SECTION 4 : FIRST AID MEASURES

4.1 Description of first aid measures

General information: Do not leave affected person unattended. ;

Following inhalation: In case of respiratory tract irritation, consult a physician.;

Following skin contact: After contact with skin, wash immediately with water ;

Following eye contact: After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time,

then consult an ophthalmologist immediately.;

Following ingestion: Do NOT induce vomiting.;

Self-protection of the first aider:

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No known symptoms to date. ; Effects:

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

SECTION 5 : FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media: This product is not flammable. Use extinguishing agent suitable for type of surrounding fire ;

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: /

5.3 Advice for fire-fighters

Wear Protective clothing. ; Additional information:

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1 *Personal precautions, protective equipment and emergency procedures*

Emergency procedures: Provide adequate ventilation.;

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

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6.2 Environmental precautions

Do not allow to enter into surface water or drains. ;

6.3 Methods and material for containment and cleaning up

For cleaning up: Suitable material for taking up: Absorbing material, organic ; Other information:

6.4 Reference to other sections

Additional information:

SECTION 7 : HANDLING AND STORAGE

7.1 Precautions for safe handling

<u>Protective measures:</u> Advice on safe handling: Avoid contact with skin, eyes and clothes. ; Fire preventions:

Do not eat, drink or smoke in areas where reagents are handled. ; <u>Advice on general occupational hygiene</u>: Handle in accordance with good industrial hygiene and safety practice ;

7.2 Conditions for safe storage, including any incompatibilities

<u>Requirements for storage rooms and vessels</u>: Keep container tightly closed. ; <u>Hints on storage assembly:</u> Materials to avoid: <u>Further information on storage conditions:</u>

7.3 Specific end uses:

Recommendations on specific end uses: Observe technical data sheet. ;

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Preliminary remark:

8.1.1 Occupational exposure limits:

• OSHA (USA)

| Source : | Occupational Safe | cupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELS) from 29 CFR 1910.1000 | | | | | | | | |
|---------------------|-------------------|---|--|---|--|--|--|--|--|--|
| Substance | EC-No. | CAS-No | OSHA Permissible Exposure Limit (PEL) 8-hour TWA (ppm) | OSHA Permissible Exposure Limit (PEL) 8- hour TWA (mg/m3) | OSHA Permissible Exposure Limit (PEL) STEL (ppm) | OSHA Permissible Exposure Limit (PEL) STEL (mg/m3) | | | | |
| 64-17-5 / 200-578-6 | 200-578-6 | 64-17-5 | 1000 | 1900 | | | | | | |

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Diluent Version: US, Page 5 of 11, Revision date: 07/09/2023

| Source : | RGS 903, November 2015, BAuA | | | | | | |
|---------------------|------------------------------|---------|-------------|-----------|--|--|--|
| Substance | EC-No. | CAS-No | BGW (mg/m3) | BGW (ppm) | | | |
| 64-17-5 / 200-578-6 | 200-578-6 | 64-17-5 | | | | | |

8.1.2 DNEL/PNEC-values:

• DNEL worker

| Source : | GESTIS – su | STIS – substance database | | | | | | | | | |
|------------------------|-------------|---------------------------|---|--|------------------|---|------------------|---|------------------|--|--|
| Substance | EC-No. | CAS-No | Acute – dermal, local effects (mg/kg/day) | Long-term – dermal, local effects (mg/kg/day) | systemic effects | Acute – inhalation, local effects (mg/m3) | systemic effects | Long-term – inhalation, local effects (mg/m3) | systemic effects | | |
| 64-17-5 / 200-578-6 | 200-578-6 | 64-17-5 | | | | | 950-950 | | | | |

• DNEL consumer

| Source : | GESTIS – s | ESTIS – substance database | | | | | | | | | |
|------------------------|------------|----------------------------|---|---------------|------------------|---|------------------|---|------------------|--|--|
| Substance | EC-No. | CAS-No | Acute – dermal, local effects (mg/kg/day) | dermal, local | systemic effects | Acute – inhalation, local effects (mg/m3) | systemic effects | Long-term – inhalation, local effects (mg/m3) | systemic effects | | |
| 64-17-5 / 200-578-6 | 200-578-6 | 64-17-5 | | | | | | | | | |

PNEC

| Source : | INERIS | | | | | | | | | | | | | | | | |
|------------------------|----------------------|---------|--------------|---------|-------|--------|--------------|-------|----------------------|---------|---------------|--------|--------------|-------|--------|---------|-------|
| | | | PNEC AQUATIC | | | | | | | | PNEC Sediment | | | | | | |
| Substance | stance EC-No. CAS-No | | freshwater | | | ma | marine water | | intermittent release | | freshwater | | marine water | | er | | |
| Substance | LC-100. | | (mg/L) | (mg/kg) | (ppm) | (mg/L) | (mg/kg) | (ppm) | (mg/L) | (mg/kg) | (ppm) | (mg/L) | (mg/kg) | (ppm) | (mg/L) | (mg/kg) | (ppm) |
| 64-17-5 / 200-578-6 | 200-578-6 | 64-17-5 | | | | | | | | | | | | | | | |

| Source : | INERIS | | | | | | | | | | | | | |
|------------------------|-----------|---------|-----------|---------|--------------------------------|--------|----------|-------|--------|-----------------------------|-------|--------|---------|-------|
| Substance | EC-No. | CAS-No | | Others | | | | | | | | | | |
| | | | PNEC soil | | PNEC sewage treatment plant | | PNEC air | | | PNEC secondary poisoning | | | | |
| | | | (mg/L) | (mg/kg) | (ppm) | (mg/L) | (mg/kg) | (ppm) | (mg/L) | (mg/kg) | (ppm) | (mg/L) | (mg/kg) | (ppm) |
| 64-17-5 / 200-578-6 | 200-578-6 | 64-17-5 | | | | | | | | | | | | |

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

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8.2 Exposure controls

8.2.1 Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7

8.2.2 <u>Personal protective equipment:</u>

Eye / Face protection: Safety glasses with side-shields ;

Skin protection:Gloves ;

Respiratory protection:Ensure adequate ventilation ;

Thermal hazards:

8.2.3 <u>Environmental exposure controls:</u>

Consumer exposure control

Measures related to consumer uses of the substance (as such or in mixtures): Measures related to the service life of the substance in articles:

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

| Appearance | |
|-----------------------|-------------|
| Physical state | Liquid ; |
| Colour | Colorless ; |
| Odour | |
| Odour threshold (ppm) | |

| | | Value | Concentration (mol/L) | Method | Temperature (°C) | Pressure (kPa) | Remark |
|---|---|-------|--------------------------|--------|------------------|----------------|--------|
| рН | | 7 | | | | | |
| Melting point (°C) | | | | | | | |
| Freezing point (°C) | | | | | | | |
| Initial boiling point/bo | oiling range (°C) | | | | | | |
| Flash point (°C) | | | | | | | |
| Evaporation rate (kg/ | m²/h) | | | | | | |
| Flammability (type :) | (%) | | | | | | |
| Upper/lower flammability or explo limits | Upper explosive limit sive (%) | | | | | | |
| limits | Lower explosive limit (%) | | | | | | |
| Vapour pressure (kPa) | | | | | | | |
| Vapour density (g/cm | 3) | | | | | | |
| | Density (g/cm ³) | | | | | | |
| Densities | Relative density (g/cm ³) | | | | | | |
| | Bulk density (g/cm ³) | | | | | | |
| | Critical density (g/cm ³) | | | | | | |
| Solubility (Type:)(g | /L) | | | | | | |
| Partition coefficient (I n-octanol/water at pl | | | | | | | |
| Auto-ignition tempera | ature (°C) | | | | | | |
| Decomposition temperature (°C) Decomposition energy : kJ | | | | | | | |
| Viscosity | Viscosity, dynamic (poiseuille) | | | | | | |
| | Viscosity, cinematic (cm ³ /s) | | | | | | |
| | Explosive properties | | | | | | |
| | Oxidising properties | | | | | | |

9.2 Other information:

No other relevant data available

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

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SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

This material is considered to be non-reactive under normal use conditions. ;

10.2 Chemical stability

- 10.3 Possibility of hazardous reactions
- 10.4 Conditions to avoid:
- 10.5 Incompatible materials:

10.6 Hazardous decomposition products:

Does not decompose when used for intended uses. ;

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution

11.1 Information on toxicological effects

Substances

• Acute toxicity

Animal data: Acute oral toxicity:

Acute dermal toxicity:

Acute inhalative toxicity:

Practical experience / human evidence: Assessment / Classification: General Remark:

• Skin corrosion/irritation

Animal data:

In-vitro skin test method: In-vitro skin test result:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Diluent Version: US, Page 8 of 11, Revision date: 07/09/2023

Assessment / Classification:

• Eye damage/irritation

Animal data:

In vitro eye test method: In vitro eye test result: Assessment / Classification:

• CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

• Germ cell mutagenicity:

Animal data:

Assessment / Classification:

• Carcinogenicity

Practical experience / human evidence: Animal data:

Other information: Assessment / Classification:

o Reproductive toxicity

Practical experience / human evidence: Animal data:

Other information: Assessment / Classification:

Overall assessment on CMR properties:

- Specific target organ toxicity (single exposure)
 - STOT SE 1 and 2

Animal data:

Other information:

o STOT SE 3

Practical experience / human evidence:

Other information: Assessment / Classification:

• Specific target organ toxicity (repeated exposure)

Practical experience / human evidence:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

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Animal data:

Assessment / Classification: Other information

• Aspiration hazard

Practical experience / human evidence: Experimental data: viscosity data: see SECTION 9. Assessment / Classification: Remark:

11.1.1 <u>Mixtures</u> No toxicological information is available for the mixture itself

SECTION 12 : ECOLOGICAL INFORMATION

In case that test data regarding one endpoint/differentiation exist for the mixture itself, the classification is carried out according to the substance criteria (excluding biodegradation and bioaccumulation). If no test data exist, the criteria for mixture classification has to be used (calculation method) in this case the toxicological data of the ingredients are shown.

12.1 Aquatic toxicity:

Acute (short-term) fish toxicity

Chronic (long-term) fish toxicity

Acute (short-term) toxicity to crustacea

Chronic (long-term) toxicity to crustacea

Acute (short-term) toxicity to algae and cyanobacteria

Toxicity to microorganisms and other aquatic plants / organisms

Assessment / Classification:

12.2 Persistence and degradability

Biodegradation:

Abiotic Degradation:

Assessment / Classification:

12.3 Bioaccumulative potential

Bioconcentration factor (BCF):

12.4 Mobility in soil

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Diluent Version: US, Page 10 of 11, Revision date: 07/09/2023

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects:

Additional ecotoxicological information:

SECTION 13 : DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste treatment options: Dispose of waste according to applicable legislation. ;

Other disposal recommendations: Additional information:

SECTION 14: TRANSPORT INFORMATION

ADR/RID/AND/IMDG/IATA

| UN No. | |
|----------------------------|--|
| UN Proper shipping name | |
| Transport hazard class(es) | |
| Hazard label(s) | |
| | |
| Packing group | |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

| Land transport (ADR/RID) | |
|---|--|
| Classification code ADR: | Special Provisions for ADR/RID: |
| Limited quantities for ADR/RID: | Excepted Quantities for ADR/RID: |
| Packing Instructions for ADR/RID: | |
| Special packing provisions for ADR/RID: | |
| Mixed packing provisions: | Portable tanks and bulk containers Instructions: |
| Portable tanks and bulk containers Special Provisio | ns: |
| ADR Tank Code: | ADR Tank special provisions: |
| Vehicle for tank carriage: | Special provisions for carriage Packages: |
| Special provisions for carriage Bulk: | |
| Special provisions for carriage for loading, unloadir | ng and handling: |
| Special Provisions for carriage Operation: | |
| Hazard identification No: | Transport category (Tunnel restriction code): |
| | |
| <u>Sea transport (IMDG)</u> | |
| Marine Pollutant: | Subsidiary risk(s) for IMDG: |
| Packing provisions for IMDG: | Limited quantities for IMDG: |
| Packing instructions for IMDG: | IBC Instructions: |
| IBC Provisions: | IMO tank instructions: |
| UN tank instructions: | Tanks and bulk Provisions: |
| EmS : | Stowage and segregation for IMDG: |
| Properties and observations: | |
| | |
| Inland waterway transport (ADN) | |

Inland waterway transport (ADN) Classification Code ADN:

Special Provisions ADN:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Diluent Version: US, Page 11 of 11, Revision date: 07/09/2023

| Limited quantities ADN: Carriage permitted: Provisions concerning loading and unloading: | Excepted quantities ADN: Equipment required: |
|--|---|
| Provisions concerning carriage: Remark: | Number of blue cones/lights: |
| <u>Air transport (ICAO-TI / IATA-DGR)</u> | |
| Subsidiary risk for IATA: | Excepted quantity for IATA: |
| Passenger and Cargo Aircraft Limited Quantities Page | cking Instructions: |
| Passenger and Cargo Aircraft Limited Quantities Ma | iximal Net Quantity : |
| Passenger and Cargo Aircraft Packaging Instructions | 5: |
| Passenger and Cargo Aircraft Maximal Net Quantity | ': |
| Cargo Aircraft only Packaging Instructions : | |
| Cargo Aircraft only Maximal Net Quantity : | |
| ERG code: | Special Provisions for IATA: |

SECTION 15 : REGULATORY INFORMATION

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

15.2 Chemical Safety Assessment:

For the following substances of this mixture a chemical safety assessment has been carried out :

SECTION 16 : OTHER INFORMATION

16.1 Indication of changes

Date of the previous version:06/09/2023 Modifications:

16.2 Abbreviations and acronyms:

16.3 Key literature references and sources for data

16.4 Classification for mixtures and used evaluation method according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g):

See SECTION 2.1 (classification).

16.5 Relevant R-, H- and EUH-phrases (number and full text):

| Code | Hazard statments |
|------|------------------------------------|
| H225 | Highly flammable liquid and vapour |

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according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Anti-HSA -d2 Version: US, Page 1 of 11, Revision date: 25/10/2021



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

Product identifier: 1.1

Designation / Trade name: Anti-HSA -d2

CAS No.:

Index No:

EC No: **REACH No:**

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

Relevant identified uses: Use of the substance or mixture for Laboratory Research use only; Uses advised against: Do not use for diagnostics, therapeutics or other clinical uses. ;

1.3 Details of the supplier of the safety data sheet:

Supplier: Name: CISBIO BIOASSAYS - CBBIOA -Address: Parc Marcel Boiteux - BP 84175 - 30200 Codolet, France Phone : +33 4 66 9 67 05 - Fax : +33 4 66 79 67 50 E-Mail (competent person): 🗐 msds@cisbio.com

1.4 **EMERGENCY TELEPHONE NUMBER:**

France - Numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59 Ce numéro permet d'obtenir les coordonnées de tous les centres Anti-poison Français. Ces centres anti-poison et de toxicovigilance fournissent une aide médicale gratuite (hors coût d'appel), 24 heures sur 24 et 7 jours sur 7.

USA & Canada - Phone: 1-888-963-456 (1)

Other countries - Phone: +33 (0) 466 796 737 (2)

http://www.cisbio.com

(1) Available from Monday to Thursday 8:30 am to 5:30pm GMT-5 and Friday: 8:30 am to 3:00pm GMT-5

(2) Available from Monday to Friday 9:00 am to 5:30 pm GMT+2

Section 2: Hazards identification

2.1 Classification of the substance or mixture:

| Classification in accordance with 29 CFR 1910 (OSHA HCS) | Category code | Hazard statement | Precautionary statement |
|---|---------------|------------------|-------------------------|
| The substance or mixture is not classified as hazardous in accordance with 29 CFR 1910 (OSHA HCS) | None | None | None |

2.2 Label elements

Labelling according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Product identifier: Designation / Trade name: Anti-HSA -d2

Substances contained in this product:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Anti-HSA -d2 Version: US, Page 2 of 11, Revision date: 25/10/2021



Hazard pictograms

Signal word:

Hazard and precautionary statements:

2.3 Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH. The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006. ;

Adverse human health effects:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

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Section 3 : Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients:

This mixture does not contain any hazardous substances at the concentration limits given in Regulation (EC) No. 1272/2008 and OSHA Hazard Communication Standard 29 CFR 1910.1200.

Additional information:

Full text of H- and EUH-phrases: see SECTION 16.

Section 4: First aid measures

4.1 Description of first aid measures

General information: Do not leave affected person unattended. ; Remove affected person from the danger area and lay down. ;

Following inhalation: In case of respiratory tract irritation, consult a physician. ; Provide fresh air. ;

Following skin contact: After contact with skin, wash immediately with water ; Remove contaminated clothing ;

Following eye contact: After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. ;

Following ingestion: Do NOT induce vomiting. ; Give nothing to eat or drink. ; If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. ; **Self-protection of the first aider**:

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No known symptoms to date. ; Effects:

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

Section 5 : Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: This product is not flammable. Use extinguishing agent suitable for type of surrounding fire ;

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: /

5.3 Advice for fire-fighters

Wear Protective clothing. ; Additional information:

Section 6 : Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Emergency procedures: Provide adequate ventilation. ; Emergency procedures: Remove persons to safety. ; Personal precautions: Use personal protection equipment (see section 8). ;

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Anti-HSA -d2 Version: US, Page 4 of 11, Revision date: 25/10/2021



6.2 Environmental precautions

Do not allow to enter into surface water or drains. ; Ensure all waste water is collected and treated via a waste water treatment plant. ;

6.3 Methods and material for containment and cleaning up

For cleaning up: Suitable material for taking up: Absorbing material, organic ; Other information:

6.4 Reference to other sections

Additional information:

Section 7: Handling and storage

7.1 Precautions for safe handling

Protective measures:

Advice on safe handling: Avoid contact with skin, eyes and clothes. ; Avoid: Eye contact ; Avoid: Generation/formation of aerosols ; Avoid: Skin contact ; Avoid: inhalation ; In the immediate working surroundings there must be: Emergency shower installed ; In the immediate working surroundings there must be: Provide eye shower and label its location conspicuously ; Wash contaminated clothing immediately. ;

Fire preventions:

Do not eat, drink or smoke in areas where reagents are handled. ; Do not pipet by mouth ; Wear suitable one-way gloves at work ;

<u>Advice on general occupational hygiene</u>: Handle in accordance with good industrial hygiene and safety practice; Observe technical data sheet.; Remove contaminated, saturated clothing.; Wash hands before breaks and after work.;

7.2 Conditions for safe storage, including any incompatibilities

<u>Requirements for storage rooms and vessels</u>: Keep container tightly closed. ; Keep-store only in original container or in properly labeled containers ; <u>Hints on storage assembly</u>: Materials to avoid:

Further information on storage conditions:

7.3 Specific end uses:

Recommendations on specific end uses: Observe technical data sheet. ;

Section 8 : Exposure controls/personal protection

8.1 Control parameters

Preliminary remark:

8.1.1 Occupational exposure limits:

• OSHA (USA)

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

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8.1.2 <u>DNEL/PNEC-values:</u>

- DNEL worker
- DNEL consumer
- PNEC

8.2 Exposure controls

8.2.1 Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7

8.2.2 <u>Personal protective equipment:</u>
Eye / Face protection: Safety glasses with side-shields ;
Skin protection:Gloves ; Laboratory coats ;
Respiratory protection:Ensure adequate ventilation ;
Thermal hazards:
8.2.3 <u>Environmental exposure controls:</u>
Consumer exposure control
<u>Measures related to consumer uses of the substance (as such or in mixtures):</u>

Measures related to the service life of the substance in articles:

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

| Physical state | Liquid ; |
|-----------------------|----------|
| Colour | Blue ; |
| Odour | |
| Odour threshold (ppm) | |

| | | Value | Concentration (mol/L) | Method | Temperature (°C) | Pressure (kPa) | Remark |
|--|------------------------------|-------|--------------------------|--------|------------------|----------------|--------|
| рН | | 7 | | | | | |
| Melting point (°C) | | | | | | | |
| Freezing point (°C) | | | | | | | |
| Initial boiling point/boiling ra | nge (°C) | | | | | | |
| Flash point (°C) | | | | | | | |
| Evaporation rate (kg/m²/h) | | | | | | | |
| Flammability (type :) (%) | | | | | | | |
| Upper/lower flammability or explosive | Upper explosive limit (%) | | | | | | |
| limits Lower explosive limit (%) | | | | | | | |
| Vapour pressure (kPa) | | | | | | | |
| Vapour density (g/cm ³) | | | | | | | |
| Density (g/cm ³) | | | | | | | |

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))



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| Densities | Relative density (g/cm ³) | | | |
|----------------------------|---|--|--|--|
| | Bulk density (g/cm ³) | | | |
| | Critical density (g/cm ³) | | | |
| Solubility (Type :) (g/L) | | | | |
| | | | | |
| Partition coefficier | nt (log Pow) | | | |
| n-octanol/water at pH : | | | | |
| Auto-ignition tem | perature (°C) | | | |
| Decomposition ter | mperature (°C) | | | |
| Decomposition en | ergy: kJ | | | |
| Viscosity | Viscosity, dynamic (poiseuille) | | | |
| | Viscosity, cinematic (cm ³ /s) | | | |
| Explosive properties | | | | |
| | Oxidising properties | | | |

9.2 Other information:

No other relevant data available

Section 10 : Stability and reactivity

10.1 Reactivity

This material is considered to be non-reactive under normal use conditions. ;

10.2 Chemical stability

- 10.3 Possibility of hazardous reactions
- 10.4 Conditions to avoid:

10.5 Incompatible materials:

10.6 Hazardous decomposition products:

Does not decompose when used for intended uses. ; Thermal decomposition can lead to the escape of irritating gases and vapors. ;

Section 11 : Toxicological information

Toxicokinetics, metabolism and distribution

11.1 Information on toxicological effects

Substances

• Acute toxicity

<u>Animal data:</u> Acute oral toxicity:

Acute dermal toxicity:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Anti-HSA -d2 Version: US, Page 7 of 11, Revision date: 25/10/2021



Acute inhalative toxicity:

Practical experience / human evidence: Assessment / Classification: General Remark:

• Skin corrosion/irritation

Animal data:

In-vitro skin test method: In-vitro skin test result:

Assessment / Classification:

• Eye damage/irritation

Animal data:

In vitro eye test method: In vitro eye test result: Assessment / Classification:

• CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

• Germ cell mutagenicity:

Animal data:

Assessment / Classification:

• Carcinogenicity

Practical experience / human evidence: Animal data:

Other information: Assessment / Classification:

• Reproductive toxicity

Practical experience / human evidence: Animal data:

Other information: Assessment / Classification:

Overall assessment on CMR properties:

- Specific target organ toxicity (single exposure)
 - \circ $\,$ STOT SE 1 and 2 $\,$

Animal data:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Anti-HSA -d2 Version: US, Page 8 of 11, Revision date: 25/10/2021



Other information:

o STOT SE 3

Practical experience / human evidence:

Other information: Assessment / Classification:

• Specific target organ toxicity (repeated exposure)

Practical experience / human evidence: Animal data:

Assessment / Classification: Other information

• Aspiration hazard

Practical experience / human evidence: Experimental data: viscosity data: see SECTION 9. Assessment / Classification: Remark:

11.1.1 <u>Mixtures</u> No toxicological information is available for the mixture itself

Section 12 : Ecological information

In case that test data regarding one endpoint/differentiation exist for the mixture itself, the classification is carried out according to the substance criteria (excluding biodegradation and bioaccumulation). If no test data exist, the criteria for mixture classification has to be used (calculation method); in this case the toxicological data of the ingredients are shown.

12.1 Aquatic toxicity:

Acute (short-term) fish toxicity

Chronic (long-term) fish toxicity

Acute (short-term) toxicity to crustacea

Chronic (long-term) toxicity to crustacea

Acute (short-term) toxicity to algae and cyanobacteria

Toxicity to microorganisms and other aquatic plants / organisms

Assessment / Classification:

12.2 *Persistence and degradability* Biodegradation:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

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Abiotic Degradation:

Assessment / Classification:

12.3 Bioaccumulative potential

Bioconcentration factor (BCF):

12.4 Mobility in soil

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects:

Additional ecotoxicological information:

Section 13 : Disposal considerations

13.1 Waste treatment methods

Waste treatment options: Dispose of waste according to applicable legislation. ;

Other disposal recommendations: Additional information:

Section 14 : Transport information

ADR/RID/AND/IMDG/IATA

| UN No. | |
|----------------------------|--|
| UN Proper shipping name | |
| Transport hazard class(es) | |
| Hazard label(s) | |
| | |
| Packing group | |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

| Land transport (ADR/RID) | |
|---|--|
| Classification code ADR: | Special Provisions for ADR/RID: |
| Limited quantities for ADR/RID: | Excepted Quantities for ADR/RID: |
| Packing Instructions for ADR/RID: | |
| Special packing provisions for ADR/RID: | |
| Mixed packing provisions: | Portable tanks and bulk containers Instructions: |
| Portable tanks and bulk containers Special Provisio | ns: |
| ADR Tank Code: | ADR Tank special provisions: |
| Vehicle for tank carriage: | Special provisions for carriage Packages: |
| Special provisions for carriage Bulk: | |
| Special provisions for carriage for loading, unloadir | ig and handling: |
| Special Provisions for carriage Operation: | |
| Hazard identification No: | Transport category (Tunnel restriction code): |
| | |

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Anti-HSA -d2 Version: US, Page 10 of 11, Revision date: 25/10/2021



Sea transport (IMDG) Marine Pollutant: Packing provisions for IMDG: Packing instructions for IMDG: IBC Provisions: UN tank instructions: EmS : Properties and observations:

Subsidiary risk(s) for IMDG: Limited quantities for IMDG: IBC Instructions: IMO tank instructions: Tanks and bulk Provisions: Stowage and segregation for IMDG:

Inland waterway transport (ADN) Classification Code ADN: Limited quantities ADN: Carriage permitted: Provisions concerning loading and unloading: Provisions concerning carriage: Remark:

Special Provisions ADN: Excepted quantities ADN: Equipment required:

Number of blue cones/lights:

Air transport (ICAO-TI / IATA-DGR)Subsidiary risk for IATA:Passenger and Cargo Aircraft Limited Quantities Packing Instructions:Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity :Passenger and Cargo Aircraft Packaging Instructions :Passenger and Cargo Aircraft Maximal Net Quantity :Cargo Aircraft only Packaging Instructions :Cargo Aircraft only Maximal Net Quantity :ERG code:Special Provisions for IATA:

Section 15 : Regulatory information

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

15.2 Chemical Safety Assessment:

For the following substances of this mixture a chemical safety assessment has been carried out :

Section 16 : Other information

16.1 Indication of changes

Date of the previous version: Modifications:

- 16.2 Abbreviations and acronyms:
- 16.3 Key literature references and sources for data
- 16.4 Classification for mixtures and used evaluation method according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g):

See SECTION 2.1 (classification).

16.5 Relevant R-, H- and EUH-phrases (number and full text):

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Anti-HSA -d2 Version: US, Page 11 of 11, Revision date: 25/10/2021



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: HSA Standard Version: US, Page 1 of 11, Revision date: 25/10/2021



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

1.1 Product identifier:

Designation / Trade name: HSA Standard

CAS No.: Index No: EC No: REACH No:

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

Relevant identified uses: Use of the substance or mixture for Laboratory Research use only ; Uses advised against: Do not use for diagnostics, therapeutics or other clinical uses. ;

1.3 Details of the supplier of the safety data sheet:

Supplier: Name: CISBIO BIOASSAYS - CBBIOA -Address: Parc Marcel Boiteux - BP 84175 - 30200 Codolet, France Phone : +33 4 66 9 67 05 - Fax : +33 4 66 79 67 50 E-Mail (competent person): subscripts msds@cisbio.com

1.4 EMERGENCY TELEPHONE NUMBER:

France - Numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59 Ce numéro permet d'obtenir les coordonnées de tous les centres Anti-poison Français. Ces centres anti-poison et de toxicovigilance fournissent une aide médicale gratuite (hors coût d'appel), 24 heures sur 24 et 7 jours sur 7.

USA & Canada - Phone: 1-888-963-456 (1)

Other countries - Phone: +33 (0) 466 796 737 (2)

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(2) Available from Monday to Friday 9:00 am to 5:30 pm GMT+2

Section 2: Hazards identification

2.1 Classification of the substance or mixture:

| Classification in accordance with 29 CFR 1910 (OSHA HCS) | Category code | Hazard statement | Precautionary statement |
|---|---------------|------------------|-------------------------|
| The substance or mixture is not classified as hazardous in accordance with 29 CFR 1910 (OSHA HCS) | None | None | None |

2.2 Label elements

Labelling according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

<u>Product identifier:</u> Designation / Trade name: HSA Standard

Substances contained in this product:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: HSA Standard Version: US, Page 2 of 11, Revision date: 25/10/2021



Hazard pictograms

Signal word:

Hazard and precautionary statements:

2.3 Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH. The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006. ;

Adverse human health effects:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: HSA Standard Version: US, Page 3 of 11, Revision date: 25/10/2021



Section 3 : Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients:

This mixture does not contain any hazardous substances at the concentration limits given in Regulation (EC) No. 1272/2008 and OSHA Hazard Communication Standard 29 CFR 1910.1200.

Additional information:

Full text of H- and EUH-phrases: see SECTION 16.

Section 4: First aid measures

4.1 Description of first aid measures

General information: Do not leave affected person unattended. ; Remove affected person from the danger area and lay down. ;

Following inhalation: In case of respiratory tract irritation, consult a physician. ; Provide fresh air. ;

Following skin contact: After contact with skin, wash immediately with water ; Remove contaminated clothing ;

Following eye contact: After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. ;

Following ingestion: Do NOT induce vomiting. ; Give nothing to eat or drink. ; If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. ; **Self-protection of the first aider**:

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No known symptoms to date. ; Effects:

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

Section 5 : Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: This product is not flammable. Use extinguishing agent suitable for type of surrounding fire ;

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: /

5.3 Advice for fire-fighters

Wear Protective clothing. ; Additional information:

Section 6 : Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Emergency procedures: Provide adequate ventilation. ; Emergency procedures: Remove persons to safety. ; Personal precautions: Use personal protection equipment (see section 8). ;

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: HSA Standard Version: US, Page 4 of 11, Revision date: 25/10/2021



6.2 Environmental precautions

Do not allow to enter into surface water or drains. ; Ensure all waste water is collected and treated via a waste water treatment plant. ;

6.3 Methods and material for containment and cleaning up

For cleaning up: Suitable material for taking up: Absorbing material, organic ; Other information:

6.4 Reference to other sections

Additional information:

Section 7: Handling and storage

7.1 Precautions for safe handling

Protective measures:

Advice on safe handling: Avoid contact with skin, eyes and clothes. ; Avoid: Eye contact ; Avoid: Generation/formation of aerosols ; Avoid: Skin contact ; Avoid: inhalation ; In the immediate working surroundings there must be: Emergency shower installed ; In the immediate working surroundings there must be: Provide eye shower and label its location conspicuously ; Wash contaminated clothing immediately. ;

Fire preventions:

Do not eat, drink or smoke in areas where reagents are handled. ; Do not pipet by mouth ; Wear suitable one-way gloves at work ;

<u>Advice on general occupational hygiene</u>: Handle in accordance with good industrial hygiene and safety practice; Observe technical data sheet.; Remove contaminated, saturated clothing.; Wash hands before breaks and after work.;

7.2 Conditions for safe storage, including any incompatibilities

<u>Requirements for storage rooms and vessels</u>: Keep container tightly closed. ; Keep-store only in original container or in properly labeled containers ; <u>Hints on storage assembly</u>: Materials to avoid:

Further information on storage conditions:

7.3 Specific end uses:

Recommendations on specific end uses: Observe technical data sheet. ;

Section 8 : Exposure controls/personal protection

8.1 Control parameters

Preliminary remark:

8.1.1 Occupational exposure limits:

• OSHA (USA)

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: HSA Standard Version: US, Page 5 of 11, Revision date: 25/10/2021



8.1.2 <u>DNEL/PNEC-values:</u>

- DNEL worker
- DNEL consumer
- PNEC

8.2 Exposure controls

8.2.1 Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7

8.2.2 <u>Personal protective equipment:</u>
Eye / Face protection: Safety glasses with side-shields ;
Skin protection:Gloves ; Laboratory coats ;
Respiratory protection:Ensure adequate ventilation ;
Thermal hazards:
8.2.3 <u>Environmental exposure controls:</u>
Consumer exposure control
<u>Measures related to consumer uses of the substance (as such or in mixtures):</u>

Measures related to the service life of the substance in articles:

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

| repearance | |
|-----------------------|-------------|
| Physical state | Liquid ; |
| Colour | Colorless ; |
| Odour | |
| Odour threshold (ppm) | |

| | | Value | Concentration (mol/L) | Method | Temperature (°C) | Pressure (kPa) | Remark |
|--|------------------------------|-------|--------------------------|--------|------------------|----------------|--------|
| Н | | 7 | (1101) 2) | | | | |
| Melting point (°C) | | | | | | | |
| Freezing point (°C) | | | | | | | |
| Initial boiling point/boiling ra | nge (°C) | | | | | | |
| Flash point (°C) | | | | | | | |
| Evaporation rate (kg/m ² /h) | | | | | | | |
| Flammability (type :) (%) | | | | | | | |
| Upper/lower flammability or explosive limits | Upper explosive limit (%) | | | | | | |
| | Lower explosive limit (%) | | | | | | |
| Vapour pressure (kPa) | | | | | | | |
| Vapour density (g/cm ³) | | | | | | | |
| Density (g/cm³) | | | | | | | |

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))



Designation / Trade name: HSA Standard Version: US, Page 6 of 11, Revision date: 25/10/2021

| Densities | Relative density (g/cm ³) | | | |
|--------------------------------|---|--|--|--|
| | Bulk density (g/cm ³) | | | |
| | Critical density (g/cm ³) | | | |
| Solubility (Type :) | (g/L) | | | |
| | | | | |
| Partition coefficient | t (log Pow) | | | |
| n-octanol/water at pH : | | | | |
| Auto-ignition temperature (°C) | | | | |
| Decomposition tem | perature (°C) | | | |
| Decomposition ene | rgy: kJ | | | |
| Viscosity | Viscosity, dynamic (poiseuille) | | | |
| | Viscosity, cinematic (cm ³ /s) | | | |
| Explosive properties | | | | |
| Oxidising properties | | | | |

9.2 Other information:

No other relevant data available

Section 10 : Stability and reactivity

10.1 Reactivity

This material is considered to be non-reactive under normal use conditions. ;

10.2 Chemical stability

- 10.3 Possibility of hazardous reactions
- 10.4 Conditions to avoid:

10.5 Incompatible materials:

10.6 Hazardous decomposition products:

Does not decompose when used for intended uses. ; Thermal decomposition can lead to the escape of irritating gases and vapors. ;

Section 11 : Toxicological information

Toxicokinetics, metabolism and distribution

11.1 Information on toxicological effects

Substances

• Acute toxicity

<u>Animal data:</u> Acute oral toxicity:

Acute dermal toxicity:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: HSA Standard Version: US, Page 7 of 11, Revision date: 25/10/2021



Acute inhalative toxicity:

Practical experience / human evidence: Assessment / Classification: General Remark:

• Skin corrosion/irritation

Animal data:

In-vitro skin test method: In-vitro skin test result:

Assessment / Classification:

• Eye damage/irritation

Animal data:

In vitro eye test method: In vitro eye test result: Assessment / Classification:

• CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

• Germ cell mutagenicity:

Animal data:

Assessment / Classification:

• Carcinogenicity

Practical experience / human evidence: Animal data:

Other information: Assessment / Classification:

• Reproductive toxicity

Practical experience / human evidence: Animal data:

Other information: Assessment / Classification:

Overall assessment on CMR properties:

- Specific target organ toxicity (single exposure)
 - \circ $\,$ STOT SE 1 and 2 $\,$

Animal data:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: HSA Standard Version: US, Page 8 of 11, Revision date: 25/10/2021



Other information:

o STOT SE 3

Practical experience / human evidence:

Other information: Assessment / Classification:

• Specific target organ toxicity (repeated exposure)

Practical experience / human evidence: Animal data:

Assessment / Classification: Other information

• Aspiration hazard

Practical experience / human evidence: Experimental data: viscosity data: see SECTION 9. Assessment / Classification: Remark:

11.1.1 <u>Mixtures</u> No toxicological information is available for the mixture itself

Section 12 : Ecological information

In case that test data regarding one endpoint/differentiation exist for the mixture itself, the classification is carried out according to the substance criteria (excluding biodegradation and bioaccumulation). If no test data exist, the criteria for mixture classification has to be used (calculation method); in this case the toxicological data of the ingredients are shown.

12.1 Aquatic toxicity:

Acute (short-term) fish toxicity

Chronic (long-term) fish toxicity

Acute (short-term) toxicity to crustacea

Chronic (long-term) toxicity to crustacea

Acute (short-term) toxicity to algae and cyanobacteria

Toxicity to microorganisms and other aquatic plants / organisms

Assessment / Classification:

12.2 *Persistence and degradability* Biodegradation:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: HSA Standard Version: US, Page 9 of 11, Revision date: 25/10/2021



Abiotic Degradation:

Assessment / Classification:

12.3 Bioaccumulative potential

Bioconcentration factor (BCF):

12.4 Mobility in soil

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects:

Additional ecotoxicological information:

Section 13 : Disposal considerations

13.1 Waste treatment methods

Waste treatment options: Dispose of waste according to applicable legislation. ;

Other disposal recommendations: Additional information:

Section 14 : Transport information

ADR/RID/AND/IMDG/IATA

| UN No. | |
|----------------------------|--|
| UN Proper shipping name | |
| Transport hazard class(es) | |
| Hazard label(s) | |
| | |
| Packing group | |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

| Land transport (ADR/RID) | |
|---|--|
| Classification code ADR: | Special Provisions for ADR/RID: |
| Limited quantities for ADR/RID: | Excepted Quantities for ADR/RID: |
| Packing Instructions for ADR/RID: | |
| Special packing provisions for ADR/RID: | |
| Mixed packing provisions: | Portable tanks and bulk containers Instructions: |
| Portable tanks and bulk containers Special Provisio | ns: |
| ADR Tank Code: | ADR Tank special provisions: |
| Vehicle for tank carriage: | Special provisions for carriage Packages: |
| Special provisions for carriage Bulk: | |
| Special provisions for carriage for loading, unloadir | ig and handling: |
| Special Provisions for carriage Operation: | |
| Hazard identification No: | Transport category (Tunnel restriction code): |
| | |

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: HSA Standard Version: US, Page 10 of 11, Revision date: 25/10/2021



Sea transport (IMDG) Marine Pollutant: Packing provisions for IMDG: Packing instructions for IMDG: IBC Provisions: UN tank instructions: EmS : Properties and observations:

Subsidiary risk(s) for IMDG: Limited quantities for IMDG: IBC Instructions: IMO tank instructions: Tanks and bulk Provisions: Stowage and segregation for IMDG:

Inland waterway transport (ADN) Classification Code ADN: Limited quantities ADN: Carriage permitted: Provisions concerning loading and unloading: Provisions concerning carriage: Remark:

Special Provisions ADN: Excepted quantities ADN: Equipment required:

Number of blue cones/lights:

Air transport (ICAO-TI / IATA-DGR)Subsidiary risk for IATA:Passenger and Cargo Aircraft Limited Quantities Packing Instructions:Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity :Passenger and Cargo Aircraft Packaging Instructions :Passenger and Cargo Aircraft Maximal Net Quantity :Cargo Aircraft only Packaging Instructions :Cargo Aircraft only Maximal Net Quantity :ERG code:Special Provisions for IATA:

Section 15 : Regulatory information

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

15.2 Chemical Safety Assessment:

For the following substances of this mixture a chemical safety assessment has been carried out :

Section 16 : Other information

16.1 Indication of changes

Date of the previous version: Modifications:

- 16.2 Abbreviations and acronyms:
- 16.3 Key literature references and sources for data
- 16.4 Classification for mixtures and used evaluation method according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g):

See SECTION 2.1 (classification).

16.5 Relevant R-, H- and EUH-phrases (number and full text):

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: HSA Standard Version: US, Page 11 of 11, Revision date: 25/10/2021



according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Anti-HSA -K Version: US, Page 1 of 11, Revision date: 25/10/2021



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

1.1 Product identifier:

Designation / Trade name: Anti-HSA -K

CAS No.:

Index No: EC No:

REACH No:

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

Relevant identified uses: Use of the substance or mixture for Laboratory Research use only ; Uses advised against: Do not use for diagnostics, therapeutics or other clinical uses. ;

1.3 Details of the supplier of the safety data sheet:

Supplier: Name: CISBIO BIOASSAYS - CBBIOA -Address: Parc Marcel Boiteux - BP 84175 - 30200 Codolet, France Phone : +33 4 66 9 67 05 - Fax : +33 4 66 79 67 50 E-Mail (competent person): msds@cisbio.com

1.4 EMERGENCY TELEPHONE NUMBER:

France - Numéro ORFILA (INRS) : + 33 (0)1 45 42 59 59 Ce numéro permet d'obtenir les coordonnées de tous les centres Anti-poison Français. Ces centres anti-poison et de toxicovigilance fournissent une aide médicale gratuite (hors coût d'appel), 24 heures sur 24 et 7 jours sur 7.

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Other countries - Phone: +33 (0) 466 796 737 (2)

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(2) Available from Monday to Friday 9:00 am to 5:30 pm GMT+2

Section 2: Hazards identification

2.1 Classification of the substance or mixture:

| Classification in accordance with 29 CFR 1910 (OSHA HCS) | Category code | Hazard statement | Precautionary statement |
|---|---------------|------------------|-------------------------|
| The substance or mixture is not classified as hazardous in accordance with 29 CFR 1910 (OSHA HCS) | None | None | None |

2.2 Label elements

Labelling according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

<u>Product identifier:</u> Designation / Trade name: Anti-HSA -K

Substances contained in this product:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Anti-HSA -K Version: US, Page 2 of 11, Revision date: 25/10/2021



Hazard pictograms

Signal word:

Hazard and precautionary statements:

2.3 Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH. The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006. ;

Adverse human health effects:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Anti-HSA -K Version: US, Page 3 of 11, Revision date: 25/10/2021



Section 3 : Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients:

This mixture does not contain any hazardous substances at the concentration limits given in Regulation (EC) No. 1272/2008 and OSHA Hazard Communication Standard 29 CFR 1910.1200.

Additional information:

Full text of H- and EUH-phrases: see SECTION 16.

Section 4: First aid measures

4.1 Description of first aid measures

General information: Do not leave affected person unattended. ; Remove affected person from the danger area and lay down. ;

Following inhalation: In case of respiratory tract irritation, consult a physician. ; Provide fresh air. ;

Following skin contact: After contact with skin, wash immediately with water ; Remove contaminated clothing ;

Following eye contact: After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. ;

Following ingestion: Do NOT induce vomiting. ; Give nothing to eat or drink. ; If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. ; **Self-protection of the first aider**:

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No known symptoms to date. ; Effects:

4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor:

Section 5 : Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: This product is not flammable. Use extinguishing agent suitable for type of surrounding fire ;

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products: /

5.3 Advice for fire-fighters

Wear Protective clothing. ; Additional information:

Section 6 : Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Emergency procedures: Provide adequate ventilation. ; Emergency procedures: Remove persons to safety. ; Personal precautions: Use personal protection equipment (see section 8). ;

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Anti-HSA -K Version: US, Page 4 of 11, Revision date: 25/10/2021



6.2 Environmental precautions

Do not allow to enter into surface water or drains. ; Ensure all waste water is collected and treated via a waste water treatment plant. ;

6.3 Methods and material for containment and cleaning up

For cleaning up: Suitable material for taking up: Absorbing material, organic ; Other information:

6.4 Reference to other sections

Additional information:

Section 7: Handling and storage

7.1 Precautions for safe handling

Protective measures:

Advice on safe handling: Avoid contact with skin, eyes and clothes. ; Avoid: Eye contact ; Avoid: Generation/formation of aerosols ; Avoid: Skin contact ; Avoid: inhalation ; In the immediate working surroundings there must be: Emergency shower installed ; In the immediate working surroundings there must be: Provide eye shower and label its location conspicuously ; Wash contaminated clothing immediately. ;

Fire preventions:

Do not eat, drink or smoke in areas where reagents are handled. ; Do not pipet by mouth ; Wear suitable one-way gloves at work ;

<u>Advice on general occupational hygiene</u>: Handle in accordance with good industrial hygiene and safety practice; Observe technical data sheet.; Remove contaminated, saturated clothing.; Wash hands before breaks and after work.;

7.2 Conditions for safe storage, including any incompatibilities

<u>Requirements for storage rooms and vessels</u>: Keep container tightly closed. ; Keep-store only in original container or in properly labeled containers ; <u>Hints on storage assembly</u>: Materials to avoid:

Further information on storage conditions:

7.3 Specific end uses:

Recommendations on specific end uses: Observe technical data sheet. ;

Section 8 : Exposure controls/personal protection

8.1 Control parameters

Preliminary remark:

8.1.1 Occupational exposure limits:

• OSHA (USA)

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

Designation / Trade name: Anti-HSA -K Version: US, Page 5 of 11, Revision date: 25/10/2021



8.1.2 <u>DNEL/PNEC-values:</u>

- DNEL worker
- DNEL consumer
- PNEC

8.2 Exposure controls

8.2.1 Appropriate engineering controls:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7

8.2.2 <u>Personal protective equipment:</u>
Eye / Face protection: Safety glasses with side-shields ;
Skin protection:Gloves ; Laboratory coats ;
Respiratory protection:Ensure adequate ventilation ;
Thermal hazards:
8.2.3 <u>Environmental exposure controls:</u>
Consumer exposure control
<u>Measures related to consumer uses of the substance (as such or in mixtures):</u>

Measures related to the service life of the substance in articles:

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

| repearance | |
|-----------------------|----------|
| Physical state | Liquid ; |
| Colour | Orange ; |
| Odour | |
| Odour threshold (ppm) | |

| | | Value | Concentration (mol/L) | Method | Temperature (°C) | Pressure (kPa) | Remark |
|--|------------------------------|-------|--------------------------|--------|------------------|----------------|--------|
| рН | | 7 | | | | | |
| Melting point (°C) | | | | | | | |
| Freezing point (°C) | | | | | | | |
| Initial boiling point/boiling ra | nge (°C) | | | | | | |
| Flash point (°C) | | | | | | | |
| Evaporation rate (kg/m ² /h) | | | | | | | |
| Flammability (type :) (%) | | | | | | | |
| Upper/lower flammability or explosive | Upper explosive limit (%) | | | | | | |
| limits | Lower explosive limit (%) | | | | | | |
| Vapour pressure (kPa) | | | | | | | |
| Vapour density (g/cm³) | | | | | | | |
| Density (g/cm³) | | | | | | | |

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))



Designation / Trade name: Anti-HSA -K Version: US, Page 6 of 11, Revision date: 25/10/2021

| Densities | Relative density (g/cm ³) | | | |
|-------------------------|---|--|--|--|
| | Bulk density (g/cm ³) | | | |
| | Critical density (g/cm ³) | | | |
| Solubility (Type : |) (g/L) | | | |
| | | | | |
| Partition coefficie | | | | |
| n-octanol/water at pH : | | | | |
| Auto-ignition tem | perature (°C) | | | |
| Decomposition te | mperature (°C) | | | |
| Decomposition er | nergy: kJ | | | |
| Viscosity | Viscosity, dynamic (poiseuille) | | | |
| F | Viscosity, cinematic (cm ³ /s) | | | |
| Explosive properties | | | | |
| Oxidising properties | | | | |

9.2 Other information:

No other relevant data available

Section 10 : Stability and reactivity

10.1 Reactivity

This material is considered to be non-reactive under normal use conditions. ;

10.2 Chemical stability

- 10.3 Possibility of hazardous reactions
- 10.4 Conditions to avoid:

10.5 Incompatible materials:

10.6 Hazardous decomposition products:

Does not decompose when used for intended uses. ; Thermal decomposition can lead to the escape of irritating gases and vapors. ;

Section 11 : Toxicological information

Toxicokinetics, metabolism and distribution

11.1 Information on toxicological effects

Substances

• Acute toxicity

<u>Animal data:</u> Acute oral toxicity:

Acute dermal toxicity:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

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Acute inhalative toxicity:

Practical experience / human evidence: Assessment / Classification: General Remark:

• Skin corrosion/irritation

Animal data:

In-vitro skin test method: In-vitro skin test result:

Assessment / Classification:

• Eye damage/irritation

Animal data:

In vitro eye test method: In vitro eye test result: Assessment / Classification:

• CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

• Germ cell mutagenicity:

Animal data:

Assessment / Classification:

• Carcinogenicity

Practical experience / human evidence: Animal data:

Other information: Assessment / Classification:

• Reproductive toxicity

Practical experience / human evidence: Animal data:

Other information: Assessment / Classification:

Overall assessment on CMR properties:

- Specific target organ toxicity (single exposure)
 - \circ $\,$ STOT SE 1 and 2 $\,$

Animal data:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

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Other information:

o STOT SE 3

Practical experience / human evidence:

Other information: Assessment / Classification:

• Specific target organ toxicity (repeated exposure)

Practical experience / human evidence: Animal data:

Assessment / Classification: Other information

• Aspiration hazard

Practical experience / human evidence: Experimental data: viscosity data: see SECTION 9. Assessment / Classification: Remark:

11.1.1 <u>Mixtures</u> No toxicological information is available for the mixture itself

Section 12 : Ecological information

In case that test data regarding one endpoint/differentiation exist for the mixture itself, the classification is carried out according to the substance criteria (excluding biodegradation and bioaccumulation). If no test data exist, the criteria for mixture classification has to be used (calculation method); in this case the toxicological data of the ingredients are shown.

12.1 Aquatic toxicity:

Acute (short-term) fish toxicity

Chronic (long-term) fish toxicity

Acute (short-term) toxicity to crustacea

Chronic (long-term) toxicity to crustacea

Acute (short-term) toxicity to algae and cyanobacteria

Toxicity to microorganisms and other aquatic plants / organisms

Assessment / Classification:

12.2 *Persistence and degradability* Biodegradation:

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

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Abiotic Degradation:

Assessment / Classification:

12.3 Bioaccumulative potential

Bioconcentration factor (BCF):

12.4 Mobility in soil

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects:

Additional ecotoxicological information:

Section 13 : Disposal considerations

13.1 Waste treatment methods

Waste treatment options: Dispose of waste according to applicable legislation. ;

Other disposal recommendations: Additional information:

Section 14 : Transport information

ADR/RID/AND/IMDG/IATA

| UN No. | |
|----------------------------|--|
| UN Proper shipping name | |
| Transport hazard class(es) | |
| Hazard label(s) | |
| | |
| Packing group | |

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

| Land transport (ADR/RID) | |
|---|--|
| Classification code ADR: | Special Provisions for ADR/RID: |
| Limited quantities for ADR/RID: | Excepted Quantities for ADR/RID: |
| Packing Instructions for ADR/RID: | |
| Special packing provisions for ADR/RID: | |
| Mixed packing provisions: | Portable tanks and bulk containers Instructions: |
| Portable tanks and bulk containers Special Provisio | ns: |
| ADR Tank Code: | ADR Tank special provisions: |
| Vehicle for tank carriage: | Special provisions for carriage Packages: |
| Special provisions for carriage Bulk: | |
| Special provisions for carriage for loading, unloadir | ig and handling: |
| Special Provisions for carriage Operation: | |
| Hazard identification No: | Transport category (Tunnel restriction code): |
| | |

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

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Sea transport (IMDG) Marine Pollutant: Packing provisions for IMDG: Packing instructions for IMDG: IBC Provisions: UN tank instructions: EmS : Properties and observations:

Subsidiary risk(s) for IMDG: Limited quantities for IMDG: IBC Instructions: IMO tank instructions: Tanks and bulk Provisions: Stowage and segregation for IMDG:

Inland waterway transport (ADN) Classification Code ADN: Limited quantities ADN: Carriage permitted: Provisions concerning loading and unloading: Provisions concerning carriage: Remark:

Special Provisions ADN: Excepted quantities ADN: Equipment required:

Number of blue cones/lights:

Air transport (ICAO-TI / IATA-DGR)Subsidiary risk for IATA:Passenger and Cargo Aircraft Limited Quantities Packing Instructions:Passenger and Cargo Aircraft Limited Quantities Maximal Net Quantity :Passenger and Cargo Aircraft Packaging Instructions :Passenger and Cargo Aircraft Maximal Net Quantity :Cargo Aircraft only Packaging Instructions :Cargo Aircraft only Maximal Net Quantity :ERG code:Special Provisions for IATA:

Section 15 : Regulatory information

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

15.2 Chemical Safety Assessment:

For the following substances of this mixture a chemical safety assessment has been carried out :

Section 16 : Other information

16.1 Indication of changes

Date of the previous version: Modifications:

- 16.2 Abbreviations and acronyms:
- 16.3 Key literature references and sources for data
- 16.4 Classification for mixtures and used evaluation method according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g):

See SECTION 2.1 (classification).

16.5 Relevant R-, H- and EUH-phrases (number and full text):

according to Hazard Communication Standard (HCS) (29 CFR 1910.1200(g))

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