<table>
<thead>
<tr>
<th>Product code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A05120</td>
<td>20-Hydroxyecdysone ELISA kit</td>
</tr>
<tr>
<td>A08100</td>
<td>Mouse anti-Rabbit precoated 96-well Strip Plate</td>
</tr>
<tr>
<td>A06120</td>
<td>20-Hydroxyecdysone Standard</td>
</tr>
<tr>
<td>A10120</td>
<td>20-Hydroxyecdysone Quality Control</td>
</tr>
<tr>
<td>A04120</td>
<td>20-Hydroxyecdysone Tracer</td>
</tr>
<tr>
<td>A03120</td>
<td>20-Hydroxyecdysone Antiserum</td>
</tr>
<tr>
<td>A07000</td>
<td>EIA Buffer</td>
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<tr>
<td>A17000</td>
<td>Wash Buffer</td>
</tr>
<tr>
<td>A12000</td>
<td>Tween 20</td>
</tr>
<tr>
<td>A09000_50</td>
<td>Ellman's Reagent 50</td>
</tr>
</tbody>
</table>
1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
Trade name: Mouse anti-Rabbit precoated 96-well Strip Plate
Article number: A08100

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.
Application of the substance / the mixture Laboratory reagent

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Bertin Technologies
10 bis avenue Ampère F-78180 Montigny-le-Bx FRANCE
Tel: +33 1 39 30 60 36 - tech@bertin-bioreagent.com

Further information obtainable from: Technical Support of Bioreagent Department

1.4 Emergency telephone number: During operating hours 09 am to 05 pm (Paris Time GMT+1) : +33 139 306 036

2 Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
The product is not classified according to the CLP regulation.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008 Void
Hazard pictograms Void
Signal word Void
Hazard statements Void

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients
Description: Mixture of substances listed below with nonhazardous additions.
Dangerous components: Void
Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

4.1 Description of first aid measures
General information: No special measures required.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

(Contd. on page 2)
4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture
No further relevant information available.

5.3 Advice for firefighters
Protective equipment: No special measures required.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Not required.

6.2 Environmental precautions:
Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:
Pick up mechanically.

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

7.1 Precautions for safe handling
No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.
Recommended storage temperature: -20 °C

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

8 Exposure controls/personal protection

8.1 Control parameters
Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
Personal protective equipment:
General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
Respiratory protection: Not required.
Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

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

Penetration time of glove material
The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Not required.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information
Appearance:
Form: Solid
Colour: According to product specification
Odour: Characteristic
Odour threshold: Not determined.

pH-value: Not applicable.

Change in condition
Melting point/freezing point: Undetermined.
Initial boiling point and boiling range: Undetermined.
Flash point: Not applicable.
Flammability (solid, gas): Not determined.

Ignition temperature:
Decomposition temperature: Not determined.
Auto-ignition temperature: Product is not selfigniting.
Explosive properties: Product does not present an explosion hazard.

Explosion limits:
Lower: Not determined.
Upper: Not determined.
Vapour pressure: Not applicable.
Density: Not determined.
Relative density: Not determined.
Vapour density: Not applicable.
Evaporation rate: Not applicable.
Solubility in / Miscibility with water: Insoluble.
Partition coefficient: n-octanol/water: Not determined.
Viscosity:
Dynamic: Not applicable.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: Mouse anti-Rabbit precoated 96-well Strip Plate

| Kinematic: | Not applicable. |
| Solvent content: | |
| Solids content: | 100.0 % |

9.2 Other information
No further relevant information available.

10 Stability and reactivity

10.1 Reactivity
No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions
No dangerous reactions known.

10.4 Conditions to avoid
No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity
Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

CAS: 7646-79-9 cobalt dichloride
Oral LD50 80 mg/kg (rat)

Primary irritant effect:

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

12 Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability
No further relevant information available.

12.3 Bioaccumulative potential
No further relevant information available.

12.4 Mobility in soil
No further relevant information available.

Additional ecological information:

General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.
Safety data sheet
class 1907/2006/EC, Article 31

Printing date 16.01.2018 Revision: 04.01.2018

Trade name: Mouse anti-Rabbit precoated 96-well Strip Plate

12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods
Recommendation Smaller quantities can be disposed of with household waste.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

14 Transport information

14.1 UN-Number
ADR, ADN, IMDG, IATA not regulated

14.2 UN proper shipping name
ADR, ADN, IMDG, IATA not regulated

14.3 Transport hazard class(es) ADR, ADN, IMDG, IATA not regulated

14.4 Packing group ADR, IMDG, IATA not regulated

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.

UN "Model Regulation": not regulated

15 Regulatory information

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

Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients is listed.

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

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

License is granted to make unlimited paper copies of this document for internal use only.

This Material Safety Data Sheet contains data necessary to ensure safety, health and environmental protection in working with chemical substances. The above-stated data match the contemporary state of knowledge and experience and are in coincidence with legal regulations currently in effect. This product is a laboratory reagent and can be solely used by persons with dedicated education at their own risk.

This product is designed for Research and Development use only. Not for drug for human nor veterinary or other uses. The manufacturer has no responsibility for damage caused by unsuitable use or by disrespecting the enclosed working instructions.

The above information is believed to be current and accurate; however, Bertin Technologies makes no warranty with respect to such information and assumes no liability for any loss or injury which may result from the use of this

(Contd. on page 6)
information. Users should conduct their own investigations to determine the suitability of the information.

**Contact:** tech@bertin-bioreagent.com

**Abbreviations and acronyms:**
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- 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)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative

* Data compared to the previous version altered.
1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: 20-Hydroxyecdysone Standard

Article number: A06120

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

No further relevant information available.

Application of the substance / the mixture: Laboratory reagent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Bertin Technologies
10 bis avenue Ampère F-78180 Montigny-le-Bx FRANCE
Tel: +33 1 39 30 60 36 - tech@bertin-bioreagent.com

Further information obtainable from: Technical Support of Bioreagent Department

1.4 Emergency telephone number: During operating hours 09 am to 05 pm (Paris Time GMT+1): +33 139 306 036

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

Hazard pictograms: Void
Signal word: Void

Hazard statements
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements
P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:
CAS: 26628-22-8 sodium azide ≥0.25–2.5%
EINECS: 247-852-1 Acute Tox. 2, H300; STOT RE 2, H373; Aquatic Chronic 1, H410

Additional information: For the wording of the listed hazard phrases refer to section 16.
Trade name: 20-Hydroxyecdyson Standard

4 First aid measures

4.1 Description of first aid measures
   After inhalation: Supply fresh air; consult doctor in case of complaints.
   After skin contact: Generally the product does not irritate the skin.
   After eye contact: Rinse opened eye for several minutes under running water.
   After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed
   No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
   No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media
   Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
   Special hazards arising from the substance or mixture
   No further relevant information available.

5.3 Advice for firefighters
   Protective equipment: No special measures required.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
   Not required.

6.2 Environmental precautions:
   Inform respective authorities in case of seepage into water course or sewage system.
   Do not allow to enter sewers/surface or ground water.

6.3 Methods and material for containment and cleaning up:
   Pick up mechanically.

6.4 Reference to other sections
   See Section 7 for information on safe handling.
   See Section 8 for information on personal protection equipment.
   See Section 13 for disposal information.

7 Handling and storage

7.1 Precautions for safe handling
   No special precautions are necessary if used correctly.
   Information about fire and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
   Storage:
   Requirements to be met by storerooms and receptacles: No special requirements.
   Information about storage in one common storage facility: Not required.
   Further information about storage conditions: None.
   Recommended storage temperature: -20 °C

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

8 Exposure controls/personal protection

   Additional information about design of technical facilities: No further data; see item 7.
8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

CAS: 26628-22-8 sodium azide

WEL
- Short-term value: 0.3 mg/m³
- Long-term value: 0.1 mg/m³
  (as NaN₃), Sk

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures: Wash hands before breaks and at the end of work.
Respiratory protection: Not required.

Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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

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

Eye protection: Not required.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:
- Form: Solid
- Colour: White
- Odour: Uncharacteristic.
- Odour threshold: Not determined.

pH-value: Not applicable.

Change in condition
- Melting point/freezing point: Undetermined.
- Initial boiling point and boiling range: 100 °C

Flash point: Not applicable.

Flammability (solid, gas): Not determined.

Ignition temperature:
- Decomposition temperature: Not determined.
- Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

Explosion limits:
- Lower: Not determined.
- Upper: Not determined.
### 9.2 Other information

No further relevant information available.

### 10 Stability and reactivity

#### 10.1 Reactivity
No further relevant information available.

#### 10.2 Chemical stability

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

#### 10.3 Possibility of hazardous reactions
No dangerous reactions known.

#### 10.4 Conditions to avoid
No further relevant information available.

#### 10.5 Incompatible materials
No further relevant information available.

#### 10.6 Hazardous decomposition products
No dangerous decomposition products known.

### 11 Toxicological information

#### 11.1 Information on toxicological effects

**Acute toxicity** Based on available data, the classification criteria are not met.

**LD/LC50 values relevant for classification:**

**CAS:** 26628-22-8 sodium azide

- Oral  LD50 27 mg/kg (rat)
- Dermal LD50 20 mg/kg (rabbit)

**Primary irritant effect:**

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

  - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
  - **Carcinogenicity** Based on available data, the classification criteria are not met.
  - **Reproductive toxicity** Based on available data, the classification criteria are not met.
  - **STOT-single exposure** Based on available data, the classification criteria are not met.
  - **STOT-repeated exposure** Based on available data, the classification criteria are not met.

**Aspiration hazard** Based on available data, the classification criteria are not met.
12 Ecological information

12.1 Toxicity
Aquatic toxicity:
CAS: 26628-22-8 sodium azide
EC50 96h (static) 0.35 mg/l (Pseudokirchneriella subcapitata)
LC50 96h 5.46 mg/l (Pimephales promelas)

12.2 Persistence and degradability No further relevant information available.
12.3 Bioaccumulative potential No further relevant information available.
12.4 Mobility in soil No further relevant information available.
Ecotoxic effects:
Remark: Harmful to fish
Additional ecological information:
General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods
Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue
HP 6 Acute Toxicity
HP 14 Ecotoxic

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

14.1 UN-Number
ADR, ADN, IMDG, IATA not regulated

14.2 UN proper shipping name
ADR, ADN, IMDG, IATA not regulated

14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA Class not regulated

14.4 Packing group
ADR, IMDG, IATA not regulated

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: 20-Hydroxyecdysone Standard

Transport/Additional information:

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<thead>
<tr>
<th>IATA</th>
<th>Remarks:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>When sold in quantities of less than or equal to 1mL or 1g with an</td>
</tr>
<tr>
<td></td>
<td>Excepted Quantity Code of E1, E2, E3, E4 or E5, this item meets the</td>
</tr>
<tr>
<td></td>
<td>De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging</td>
</tr>
<tr>
<td></td>
<td>does not have to be labeled as Dangerous Goods/Excepted Quantity</td>
</tr>
<tr>
<td></td>
<td>not regulated</td>
</tr>
</tbody>
</table>

UN "Model Regulation":

15 Regulatory information

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

Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients is listed.

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

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. License is granted to make unlimited paper copies of this document for internal use only.

This Material Safety Data Sheet contains data necessary to ensure safety, health and environmental protection in working with chemical substances. The above-stated data match the contemporary state of knowledge and experience and are in coincidence with legal regulations currently in effect. This product is a laboratory reagent and can be solely used by persons with dedicated education at their own risk.

This product is designed for Research and Development use only. Not for drug for human nor veterinary or other uses. The manufacturer has no responsibility for damage caused by unsuitable use or by disrespecting the enclosed working instructions.

The above information is believed to be current and accurate; however, Bertin Technologies makes no warranty with respect to such information and assumes no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

Relevant phrases
H300 Fatal if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Contact: tech@bertin-bioreagent.com

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 2: Acute toxicity – Category 2
Trade name: 20-Hydroxyecdysone Standard

- STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
- 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
- Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

* Data compared to the previous version altered.
1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: 20-Hydroxyecdysone Quality Control

Article number: A10120

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

No further relevant information available.

Application of the substance / the mixture  Laboratory reagent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Bertin Technologies
10 bis avenue Ampère F-78180 Montigny-le-Bx FRANCE
Tel: +33 1 39 30 60 36 - tech@bertin-bioreagent.com

Further information obtainable from: Technical Support of Bioreagent Department

1.4 Emergency telephone number: During operating hours 09 am to 05 pm (Paris Time GMT+1) : +33 139 306 036

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

Hazard pictograms Void
Signal word Void

Hazard statements
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements
P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:
CAS: 26628-22-8  sodium azide  ≥0.25–≤2.5%
EINECS: 247-852-1  Acute Tox. 2, H300;  STOT RE 2, H373;  Aquatic Acute 1, H400;  Aquatic Chronic 1, H410

Additional information: For the wording of the listed hazard phrases refer to section 16.
Trade name: 20-Hydroxyecdysone Quality Control

4 First aid measures

4.1 Description of first aid measures
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture
No further relevant information available.

5.3 Advice for firefighters
- Protective equipment: No special measures required.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Not required.

6.2 Environmental precautions:
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:
Pick up mechanically.

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

7.1 Precautions for safe handling
No special precautions are necessary if used correctly.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
- **Storage:**
  - Requirements to be met by storerooms and receptacles: No special requirements.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: None.
  - Recommended storage temperature: -20 °C

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

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.
8.1 Control parameters
Ingredients with limit values that require monitoring at the workplace:

CAS: 26628-22-8 sodium azide
WEL Short-term value: 0.3 mg/m³
Long-term value: 0.1 mg/m³
(as Na₃N₃), Sk

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
Personal protective equipment:
General protective and hygienic measures: Wash hands before breaks and at the end of work.
Respiratory protection: Not required.
Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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

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

Eye protection: Not required.

---

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties
General Information
Appearance:
Form: Solid
Colour: White
Odour: Uncharacteristic.
Odour threshold: Not determined.

pH-value: Not applicable.

Change in condition
Melting point/freezing point: Undetermined.
Initial boiling point and boiling range: 100 °C

Flash point: Not applicable.

Flammability (solid, gas): Not determined.

Ignition temperature:
Decomposition temperature: Not determined.
Auto-ignition temperature: Product is not selfigniting.
Explosive properties: Product does not present an explosion hazard.

Explosion limits:
Lower: Not determined.
Upper: Not determined.

(Contd. on page 4)
Trade name: 20-Hydroxyecdysone Quality Control

Vapour pressure: Not applicable.
Density: Not determined.
Relative density: Not determined.
Vapour density: Not applicable.
Evaporation rate: Not applicable.
Solubility in / Miscibility with water: Soluble.
Partition coefficient: n-octanol/water: Not determined.
Viscosity:
Dynamic: Not applicable.
Kinematic: Not applicable.
Solvent content:
Solids content: 100.0 %

9.2 Other information
No further relevant information available.

10 Stability and reactivity

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

11 Toxicological information

11.1 Information on toxicological effects
Acute toxicity Based on available data, the classification criteria are not met.
LD/LC50 values relevant for classification:
CAS: 26628-22-8 sodium azide
Oral LD50 27 mg/kg (rat)
Dermal LD50 20 mg/kg (rabbit)
Primary irritant effect:
Skin corrosion/irritation Based on available data, the classification criteria are not met.
Serious eye damage/irritation Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
Germ cell mutagenicity Based on available data, the classification criteria are not met.
Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive toxicity Based on available data, the classification criteria are not met.
STOT-single exposure Based on available data, the classification criteria are not met.
STOT-repeated exposure Based on available data, the classification criteria are not met.
Aspiration hazard Based on available data, the classification criteria are not met.
12 Ecological information

12.1 Toxicity
Aquatic toxicity:

CAS: 26628-22-8 sodium azide
EC50 96h (static) 0.35 mg/l (Pseudokirchneriella subcapitata)
LC50 96h 5.46 mg/l (Pimephales promelas)

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Ecotoxic effects:
Remark: Harmful to fish

Additional ecological information:
General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods
Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue
HP 6  Acute Toxicity
HP 14 Ecotoxic

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

14.1 UN-Number
ADR, ADN, IMDG, IATA not regulated

14.2 UN proper shipping name
ADR, ADN, IMDG, IATA not regulated

14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA
Class not regulated

14.4 Packing group
ADR, IMDG, IATA not regulated

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.
Trade name: 20-Hydroxyecdysone Quality Control

Transport/Additional information:

IATA
Remarks: When sold in quantities of less than or equal to 1mL or 1g with an Excepted Quantity Code of E1, E2, E3, E4 or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity UN "Model Regulation": not regulated

15 Regulatory information

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

Directive 2012/18/EU Named dangerous substances - ANNEX I None of the ingredients is listed.

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

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. License is granted to make unlimited paper copies of this document for internal use only.

This Material Safety Data Sheet contains data necessary to ensure safety, health and environmental protection in working with chemical substances. The above-stated data match the contemporary state of knowledge and experience and are in coincidence with legal regulations currently in effect. This product is a laboratory reagent and can be solely used by persons with dedicated education at their own risk.

This product is designed for Research and Development use only. Not for drug for human nor veterinary or other uses. The manufacturer has no responsibility for damage caused by unsuitable use or by disrespecting the enclosed working instructions.

The above information is believed to be current and accurate; however, Bertin Technologies makes no warranty with respect to such information and assumes no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

Relevant phrases
H300 Fatal if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Contact: tech@bertin-bioreagent.com

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 2: Acute toxicity – Category 2
Trade name: 20-Hydroxyecdysone Quality Control

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
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
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

* Data compared to the previous version altered.
1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: 20-Hydroxyecdysone Tracer

Article number: A04120

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

No further relevant information available.

Application of the substance / the mixture Laboratory reagent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Bertin Technologies
10 bis avenue Ampère F-78180 Montigny-le-Bx FRANCE
Tel: +33 1 39 30 60 36 - tech@bertin-bioreagent.com

Further information obtainable from: Technical Support of Bioreagent Department

1.4 Emergency telephone number: During operating hours 09 am to 05 pm (Paris Time GMT+1): +33 139 306 036

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

Hazard pictograms

Signal word Void

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 26628-22-8 sodium azide ≥0.25-≤2.5%
EINECS: 247-852-1 Acute Tox. 2, H300; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410

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

(Contd. on page 2)
4 First aid measures

4.1 Description of first aid measures
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture
No further relevant information available.

5.3 Advice for firefighters
Protective equipment: No special measures required.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Not required.

6.2 Environmental precautions:
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up
Pick up mechanically.

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

7.1 Precautions for safe handling
No special precautions are necessary if used correctly.
Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.
Recommended storage temperature: -20 °C

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

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.
8.1 Control parameters
Ingredients with limit values that require monitoring at the workplace:
CAS: 26628-22-8 sodium azide
WEL Short-term value: 0.3 mg/m³
Long-term value: 0.1 mg/m³
(as NaN₃), Sk
Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
Personal protective equipment:
General protective and hygienic measures: Wash hands before breaks and at the end of work.
Respiratory protection: Not required.
Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection: Not required.

9 Physical and chemical properties
9.1 Information on basic physical and chemical properties
General Information
Appearance:
Form: Solid
Colour: Whitish
Odour: Uncharacteristic.
Odour threshold: Not determined.

pH-value:
Not applicable.

Change in condition
Melting point/freezing point: Undetermined.
Initial boiling point and boiling range: 100 °C

Flash point:
Not applicable.

Flammability (solid, gas):
Not determined.

Ignition temperature:

Decomposition temperature:
Not determined.

Auto-ignition temperature:
Product is not selfigniting.

Explosive properties:
Product does not present an explosion hazard.

Explosion limits:
Lower: Not determined.
Upper: Not determined.
Trade name: 20-Hydroxyecdysone Tracer

9.2 Other information: No further relevant information available.

10 Stability and reactivity

10.1 Reactivity: No further relevant information available.
10.2 Chemical stability: No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions: No dangerous reactions known.
10.4 Conditions to avoid: No further relevant information available.
10.5 Incompatible materials: No further relevant information available.
10.6 Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

11.1 Information on toxicological effects
11.1.1 Acute toxicity: Based on available data, the classification criteria are not met.
CAS: 26628-22-8 sodium azide
Oral LD50 27 mg/kg (rat)
Dermal LD50 20 mg/kg (rabbit)
Primary irritant effect:
Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/irritation: Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.
CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.
STOT-single exposure: Based on available data, the classification criteria are not met.
STOT-repeated exposure: Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.
12 Ecological information

12.1 Toxicity
Aquatic toxicity:
CAS: 26628-22-8 sodium azide
EC50 96h (static) 0.35 mg/l (Pseudokirchneriella subcapitata)
LC50 96h 5.46 mg/l (Pimephales promelas)

12.2 Persistence and degradability No further relevant information available.
12.3 Bioaccumulative potential No further relevant information available.
12.4 Mobility in soil No further relevant information available.

Ecotoxic effects:
Remark: Harmful to fish

Additional ecological information:
General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods
Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue
HP 6 Acute Toxicity
HP 14 Ecotoxic

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

14.1 UN-Number
ADR, ADN, IMDG, IATA not regulated

14.2 UN proper shipping name
ADR, ADN, IMDG, IATA not regulated

14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA
Class not regulated

14.4 Packing group
ADR, IMDG, IATA not regulated

14.5 Environmental hazards:
Not applicable.

14.6 Special precautions for user
Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.
**Trade name:** 20-Hydroxyecdysone Tracer

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**Transport/Additional information:**

<table>
<thead>
<tr>
<th>IATA</th>
<th>Remarks:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>When sold in quantities of less than or equal to 1mL or 1g with an Excepted Quantity Code of E1, E2, E3, E4 or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity</td>
</tr>
</tbody>
</table>

**UN "Model Regulation":**

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**15 Regulatory information**

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

**Directive 2012/18/EU**

Named dangerous substances - ANNEX I None of the ingredients is listed.

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

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**16 Other information**

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This product is designed for Research and Development use only. Not for drug for human nor veterinary or other uses. The manufacturer has no responsibility for damage caused by unsuitable use or by disrespecting the enclosed working instructions.

The above information is believed to be current and accurate; however, Bertin Technologies makes no warranty with respect to such information and assumes no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

**Relevant phrases**

H300 Fatal if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

**Contact:** tech@bertin-bioreagent.com

**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 2: Acute toxicity – Category 2
Trade name: 20-Hydroxyecdyson Tracer

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
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
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

* Data compared to the previous version altered.
### 1 Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

**Trade name:** 20-Hydroxyecdysone Antiserum

**Article number:** A03120

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

No further relevant information available.

**Application of the substance / the mixture** Laboratory reagent

#### 1.3 Details of the supplier of the safety data sheet

**Manufacturer/Supplier:**
Bertin Technologies
10 bis avenue Ampère F-78180 Montigny-le-Bx FRANCE
Tel: +33 1 39 30 60 36 - tech@bertin-bioreagent.com

**Further information obtainable from:** Technical Support of Bioreagent Department

#### 1.4 Emergency telephone number:
During operating hours 09 am to 05 pm (Paris Time GMT+1) : +33 139 306 036

### 2 Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

#### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements**
  - H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

- **P273** Avoid release to the environment.
- **P501** Dispose of contents/container in accordance with local/regional/national/international regulations.

#### 2.3 Other hazards

**Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

**Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

- CAS: 26628-22-8 sodium azide
- EINECS: 247-852-1 Acute Tox. 2, H300; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410

**Additional information:** For the wording of the listed hazard phrases refer to section 16.
4 First aid measures

4.1 Description of first aid measures
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture
No further relevant information available.

5.3 Advice for firefighters
Protective equipment: No special measures required.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Not required.

6.2 Environmental precautions: Inform respective authorities in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up: Pick up mechanically.

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

7.1 Precautions for safe handling
No special precautions are necessary if used correctly.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.
Recommended storage temperature: -20 °C

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

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.
8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

CAS: 26628-22-8 sodium azide

WEL
- Short-term value: 0.3 mg/m³
- Long-term value: 0.1 mg/m³
  (as NaN₃), Sk

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures: Wash hands before breaks and at the end of work.

Respiratory protection: Not required.

Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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

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

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

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

Eye protection: Not required.

---

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:
- Form: Solid
- Colour: Whitish
- Odour: Uncharacteristic.
- Odour threshold: Not determined.

pH-value: Not applicable.

Change in condition
- Melting point/freezing point: Undetermined.
- Initial boiling point and boiling range: Undetermined.

Flash point: Not applicable.

Flammability (solid, gas): Not determined.

Ignition temperature:
- Decomposition temperature: Not determined.
- Auto-ignition temperature: Product is not selfigniting.
- Explosive properties: Product does not present an explosion hazard.

Explosion limits:
- Lower: Not determined.
- Upper: Not determined.
Vapour pressure: Not applicable.
Density: Not determined.
Relative density Not determined.
Vapour density Not applicable.
Evaporation rate Not applicable.

Solubility in / Miscibility with water: Soluble.
Partition coefficient: n-octanol/water: Not determined.

Viscosity:
Dynamic: Not applicable.
Kinematic: Not applicable.

Solvent content:
Solids content: 100.0 %

9.2 Other information No further relevant information available.

10 Stability and reactivity

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

11 Toxicological information

11.1 Information on toxicological effects
Acute toxicity Based on available data, the classification criteria are not met.
LD/LC50 values relevant for classification:
CAS: 26628-22-8 sodium azide
Oral LD50 27 mg/kg (rat)
Dermal LD50 20 mg/kg (rabbit)

Primary irritant effect:
Skin corrosion/irritation Based on available data, the classification criteria are not met.
Serious eye damage/irritation Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
Germ cell mutagenicity Based on available data, the classification criteria are not met.
Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive toxicity Based on available data, the classification criteria are not met.
STOT-single exposure Based on available data, the classification criteria are not met.
STOT-repeated exposure Based on available data, the classification criteria are not met.
Aspiration hazard Based on available data, the classification criteria are not met.
Trade name: 20-Hydroxyecdysone Antiserum

12 Ecological information

12.1 Toxicity
Aquatic toxicity:
CAS: 26628-22-8 sodium azide
EC50 96h (static) 0.35 mg/l (Pseudokirchneriella subcapitata)
LC50 96h 5.46 mg/l (Pimephales promelas)

12.2 Persistence and degradability
No further relevant information available.

12.3 Bioaccumulative potential
No further relevant information available.

12.4 Mobility in soil
No further relevant information available.

Ecotoxic effects:
Remark: Harmful to fish

Additional ecological information:
General notes:
Generally not hazardous for water
Harmful to aquatic organisms

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

12.6 Other adverse effects
No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods
Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue
HP 6 Acute Toxicity
HP 14 Ecotoxic

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

14.1 UN-Number
ADR, ADN, IMDG, IATA not regulated

14.2 UN proper shipping name
ADR, ADN, IMDG, IATA not regulated

14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA not regulated

14.4 Packing group
ADR, IMDG, IATA not regulated

14.5 Environmental hazards:
Not applicable.

14.6 Special precautions for user
Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.
Trade name: 20-Hydroxyecdysone Antiserum

Transport/Additional information:

IATA
Remarks: When sold in quantities of less than or equal to 1mL or 1g with an Excepted Quantity Code of E1, E2, E3, E4 or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity

UN "Model Regulation": not regulated

15 Regulatory information

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

Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients is listed.

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

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
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This product is designed for Research and Development use only. Not for drug for human nor veterinary or other uses. The manufacturer has no responsibility for damage caused by unsuitable use or by disrespecting the enclosed working instructions.

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Relevant phrases
H300 Fatal if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Contact: tech@bertin-bioreagent.com

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 2: Acute toxicity – Category 2
Trade name: 20-Hydroxyecdysone Antiserum

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
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
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

* Data compared to the previous version altered.
1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: EIA Buffer

Article number: A07000

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

No further relevant information available.

Application of the substance / the mixture: Laboratory reagent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
Bertin Technologies
10 bis avenue Ampère F-78180 Montigny-le-Bx FRANCE
Tel: +33 1 39 30 60 36 - tech@bertin-bioreagent.com

Further information obtainable from: Technical Support of Bioreagent Department

1.4 Emergency telephone number: During operating hours 09 am to 05 pm (Paris Time GMT+1) : +33 139 306 036

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms: Void

Signal word: Void

Hazard statements:

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 26628-22-8 sodium azide ≥0.25-%2.5%

EINECS: 247-852-1 Acute Tox. 2, H300; STOT RE 2, H373; Aquatic Chronic 1, H410

Aquatic Acute 1, H400; Aquatic Chronic 1, H410

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

(Contd. on page 2)
4 First aid measures

4.1 Description of first aid measures
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture No further relevant information available.

5.3 Advice for firefighters
Protective equipment: No special measures required.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Not required.

6.2 Environmental precautions:
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up: Pick up mechanically.

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

7.1 Precautions for safe handling No special precautions are necessary if used correctly.
Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.
Recommended storage temperature: -20 °C

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

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.
8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

CAS: 26628-22-8 sodium azide
WEL Short-term value: 0.3 mg/m³
Long-term value: 0.1 mg/m³
(as NaN₃), Sk

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures: Wash hands before breaks and at the end of work.
Respiratory protection: Not required.
Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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

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

Eye protection: Not required.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:
Form: Solid
Colour: Whitish
Odour: Uncharacteristic.
Odour threshold: Not determined.

pH-value: Not applicable.

Change in condition
Melting point/freezing point: Undetermined.
Initial boiling point and boiling range: 1,461 °C

Flash point: Not applicable.

Flammability (solid, gas): Not determined.

Ignition temperature:
Decomposition temperature: Not determined.
Auto-ignition temperature: Product is not selfigniting.

Explosive properties:
Product does not present an explosion hazard.

Explosion limits:
Lower: Not determined.
Upper: Not determined.
Trade name: EIA Buffer

Vapour pressure: Not applicable.
Density: Not determined.
Relative density Not determined.
Vapour density Not applicable.
Evaporation rate Not applicable.
Solubility in / Miscibility with water: Soluble.
Partition coefficient: n-octanol/water: Not determined.
Viscosity:
Dynamic: Not applicable.
Kinematic: Not applicable.
Solvent content:
Solids content: 100.0 %

9.2 Other information No further relevant information available.

10 Stability and reactivity

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

11 Toxicological information

11.1 Information on toxicological effects
Acute toxicity Based on available data, the classification criteria are not met.
LD/LC50 values relevant for classification:
CAS: 26628-22-8 sodium azide
Oral LD50 27 mg/kg (rat)
Dermal LD50 20 mg/kg (rabbit)
Primary irritant effect:
Skin corrosion/irritation Based on available data, the classification criteria are not met.
Serious eye damage/irritation Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
Germ cell mutagenicity Based on available data, the classification criteria are not met.
Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive toxicity Based on available data, the classification criteria are not met.
STOT-single exposure Based on available data, the classification criteria are not met.
STOT-repeated exposure Based on available data, the classification criteria are not met.
Aspiration hazard Based on available data, the classification criteria are not met.
Trade name: EIA Buffer

12 Ecological information

12.1 Toxicity
Aquatic toxicity:
CAS: 26628-22-8 sodium azide
EC50 96h (static) 0.35 mg/l (Pseudokirchneriella subcapitata)
LC50 96h 5.46 mg/l (Pimephales promelas)

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Ecotoxic effects:
Remark: Harmful to fish

Additional ecological information:
General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Harmful to aquatic organisms

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods
Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue
HP 6 Acute Toxicity
HP 14 Ecotoxic

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

14.1 UN-Number
ADR, ADN, IMDG, IATA
ADR, ADN, IMDG, IATA
14.2 UN proper shipping name
ADR, ADN, IMDG, IATA
ADR, ADN, IMDG, IATA
14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA

14.4 Packing group
ADR, IMDG, IATA

14.5 Environmental hazards:
Not applicable.
14.6 Special precautions for user
Not applicable.
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.
Trade name: EIA Buffer

Transport/Additional information:

IATA

Remarks: When sold in quantities of less than or equal to 1mL or 1g with an Excepted Quantity Code of E1, E2, E3, E4 or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity UN "Model Regulation": not regulated

15 Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

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

16 Other information

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

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Relevant phrases

H300 Fatal if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Contact: tech@bertin-bioreagent.com

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
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IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 2: Acute toxicity – Category 2
### Trade name: EIA Buffer

<table>
<thead>
<tr>
<th>Hazard Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2</td>
</tr>
<tr>
<td>Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3</td>
</tr>
</tbody>
</table>

* Data compared to the previous version altered.
1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
Trade name: Wash Buffer
Article number: A17000

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
Bertin Technologies
10 bis avenue Ampère F-78180 Montigny-le-Bx FRANCE
Tel: +33 1 39 30 60 36 - tech@bertin-bioreagent.com

Further information obtainable from: Technical Support of Bioreagent Department

1.4 Emergency telephone number: During operating hours 09 am to 05 pm (Paris Time GMT+1) : +33 139 306 036

2 Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
The product is not classified according to the CLP regulation.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008 Void
Hazard pictograms Void
Signal word Void
Hazard statements Void

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components: Void

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

4 First aid measures

4.1 Description of first aid measures
General information: No special measures required.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Generally the product does not irritate the skin.
After eye contact: Rinse opened eye for several minutes under running water.
After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
Trade name: Wash Buffer

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
5.2 Special hazards arising from the substance or mixture No further relevant information available.
5.3 Advice for firefighters
Protective equipment: No special measures required.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Not required.
6.2 Environmental precautions:
Dilute with plenty of water.
Do not allow to enter sewers/surface or ground water.
6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

7.1 Precautions for safe handling No special measures required.
Information about fire - and explosion protection: No special measures required.
7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: None.
Recommended storage temperature: -20 °C
7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.
8.1 Control parameters
Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Additional information: The lists valid during the making were used as basis.
8.2 Exposure controls
Personal protective equipment:
General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.
Respiratory protection: Not required.

Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

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

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

Eye protection: Goggles recommended during refilling

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9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>General Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance:</strong></td>
</tr>
<tr>
<td>Form: Fluid</td>
</tr>
<tr>
<td>Colour: Colourless</td>
</tr>
<tr>
<td>Odour: Odourless</td>
</tr>
<tr>
<td>Odour threshold: Not determined.</td>
</tr>
<tr>
<td>pH-value at 20 °C: 7.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Change in condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/freezing point: Undetermined.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range: 100 °C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flammable properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability (solid, gas): Not applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ignition temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decomposition temperature: Not determined.</td>
</tr>
<tr>
<td>Auto-ignition temperature: Product is not selfigniting.</td>
</tr>
<tr>
<td>Explosive properties: Product does not present an explosion hazard.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Explosion limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower: Not determined.</td>
</tr>
<tr>
<td>Upper: Not determined.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vapour pressure at 20 °C:</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 hPa</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not determined.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Relative density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not determined.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vapour density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not determined.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evaporation rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not determined.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solubility in / Miscibility with water:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully miscible.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partition coefficient: n-octanol/water:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not determined.</td>
</tr>
</tbody>
</table>
Trade name: Wash Buffer

Viscosity:
Dynamic: Not determined.
Kinematic: Not determined.

Solvent content:
Water: 60.0 %

Solids content: 40.0 %

9.2 Other information No further relevant information available.

10 Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability
Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.
Primary irritant effect:
Skin corrosion/irritation Based on available data, the classification criteria are not met.
Serious eye damage/irritation Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
Germ cell mutagenicity Based on available data, the classification criteria are not met.
Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive toxicity Based on available data, the classification criteria are not met.
STOT-single exposure Based on available data, the classification criteria are not met.
STOT-repeated exposure Based on available data, the classification criteria are not met.
Aspiration hazard Based on available data, the classification criteria are not met.

12 Ecological information

12.1 Toxicity
Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Additional ecological information:

General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
12.6 Other adverse effects  No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods
Recommendation Smaller quantities can be disposed of with household waste.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

14.1 UN-Number
ADR, ADN, IMDG, IATA not regulated

14.2 UN proper shipping name
ADR, ADN, IMDG, IATA not regulated

14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA not regulated

14.4 Packing group
ADR, IMDG, IATA not regulated

14.5 Environmental hazards:
Not applicable.

14.6 Special precautions for user
Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
UN "Model Regulation": Not applicable.

15 Regulatory information

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

Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients is listed.

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

16 Other information

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The above information is believed to be current and accurate; however, Bertin Technologies makes no warranty with
Trade name: Wash Buffer

respect to such information and assumes no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

Contact: tech@bertin-bioreagent.com

Abbreviations and acronyms:
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IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
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)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

* Data compared to the previous version altered.
### 1 Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

- **Trade name:** Tween 20
- **Article number:** A12000
- **CAS Number:** 9005-64-5
- **NLP Number:** 500-018-3

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

No further relevant information available.

**Application of the substance / the mixture** Laboratory reagent

#### 1.3 Details of the supplier of the safety data sheet

**Manufacturer/Supplier:**

Bertin Technologies  
10 bis avenue Ampère F-78180 Montigny-le-Bx FRANCE  
Tel: +33 1 39 30 60 36 - tech@bertin-bioreagent.com

**Further information obtainable from:** Technical Support of Bioreagent Department

#### 1.4 Emergency telephone number:

During operating hours 09 am to 05 pm (Paris Time GMT+1) : +33 139 306 036

### 2 Hazards identification

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008  
The substance is not classified according to the CLP regulation.

#### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008  
- **Hazard pictograms:** Void
- **Signal word:** Void
- **Hazard statements:** Void

#### 2.3 Other hazards

**Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

#### 3.1 Chemical characterisation: Substances

- **CAS No. Description**  
  - 9005-64-5 Tween 20
- **Identification number(s)**
  - NLP Number: 500-018-3

### 4 First aid measures

#### 4.1 Description of first aid measures

**General information:** No special measures required.

**After inhalation:** Supply fresh air; consult doctor in case of complaints.
Safety data sheet  
according to 1907/2006/EC, Article 31

Trade name: Tween 20

After skin contact: Generally the product does not irritate the skin.  
After eye contact: Rinse opened eye for several minutes under running water. 
After swallowing: If symptoms persist consult doctor. 

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available. 
4.3 Indication of any immediate medical attention and special treatment needed 
No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media 
Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions. 

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

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Not required. 
6.2 Environmental precautions: 
Dilute with plenty of water. 
Do not allow to enter sewers/surface or ground water. 

6.3 Methods and material for containment and cleaning up: 
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

6.4 Reference to other sections 
See Section 7 for information on safe handling. 
See Section 8 for information on personal protection equipment. 
See Section 13 for disposal information. 

7 Handling and storage

7.1 Precautions for safe handling No special measures required. 
Information about fire - and explosion protection: No special measures required. 

7.2 Conditions for safe storage, including any incompatibilities 
Storage: 
Requirements to be met by storerooms and receptacles: No special requirements. 
Information about storage in one common storage facility: Not required. 
Further information about storage conditions: None. 
Recommended storage temperature: 20 °C 

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

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7. 

8.1 Control parameters 
Ingredients with limit values that require monitoring at the workplace: Not required. 
Additional information: The lists valid during the making were used as basis.
8.2 Exposure controls

**Personal protective equipment:**

**General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.

**Respiratory protection:** Not required.

**Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

**Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**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 properties

9.1 Information on basic physical and chemical properties

**General Information**

**Appearance:** Highly viscous

**Form:** Highly viscous

**Colour:** Light yellow

**Odour:** Characteristic

**Odour threshold:** Not determined.

**pH-value:** Not determined.

**Change in condition**

**Melting point/freezing point:** Undetermined.

**Initial boiling point and boiling range:** Undetermined.

**Flash point:** 275 °C

**Flammability (solid, gas):** Not applicable.

**Ignition temperature:**

**Decomposition temperature:** Not determined.

**Auto-ignition temperature:** Not determined.

**Explosive properties:**

Product does not present an explosion hazard.

**Explosion limits:**

**Lower:** Not determined.

**Upper:** Not determined.

**Vapour pressure:** Not determined.

**Density at 20 °C:** 1.1 g/cm³

**Relative density**

Not determined.

**Vapour density**

Not determined.

**Evaporation rate**

Not determined.
Trade name: Tween 20

Solubility in / Miscibility with
  water: Fully miscible.
Partition coefficient: n-octanol/water: Not determined.
Viscosity:
  Dynamic at 20 °C: 400 mPas
  Kinematic: Not determined.
Solids content: 0.0 %

9.2 Other information No further relevant information available.

10 Stability and reactivity

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

11 Toxicological information

11.1 Information on toxicological effects
  Acute toxicity Based on available data, the classification criteria are not met.
  LD/LC50 values relevant for classification:
    CAS: 9005-64-5 Tween 20
    Oral LD50 38,900 mg/kg (rat)
  Primary irritant effect:
    Skin corrosion/irritation Based on available data, the classification criteria are not met.
    Serious eye damage/irritation Based on available data, the classification criteria are not met.
  Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
  CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
    Germ cell mutagenicity Based on available data, the classification criteria are not met.
    Carcinogenicity Based on available data, the classification criteria are not met.
    Reproductive toxicity Based on available data, the classification criteria are not met.
    STOT-single exposure Based on available data, the classification criteria are not met.
    STOT-repeated exposure Based on available data, the classification criteria are not met.
  Aspiration hazard Based on available data, the classification criteria are not met.

12 Ecological information

12.1 Toxicity
  Aquatic toxicity: No further relevant information available.
12.2 Persistence and degradability No further relevant information available.
12.3 Bioaccumulative potential No further relevant information available.
12.4 Mobility in soil No further relevant information available.
Additional ecological information:
  General notes:
    Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

12.6 Other adverse effects
No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods
Recommendation: Smaller quantities can be disposed of with household waste.

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

14.1 UN-Number
ADR, ADN, IMDG, IATA: not regulated

14.2 UN proper shipping name
ADR, ADN, IMDG, IATA: not regulated

14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA: not regulated

14.4 Packing group
ADR, IMDG, IATA: not regulated

14.5 Environmental hazards:
Not applicable.

14.6 Special precautions for user
Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Directive 2012/18/EU
Named dangerous substances - ANNEX I Substance is not listed.

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

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
License is granted to make unlimited paper copies of this document for internal use only.

This Material Safety Data Sheet contains data necessary to ensure safety, health and environmental protection in working with chemical substances. The above-stated data match the contemporary state of knowledge and experience and are in coincidence with legal regulations currently in effect. This product is a laboratory reagent and can be solely used by persons with dedicated education at their own risk.

This product is designed for Research and Development use only. Not for drug for human nor veterinary or other uses.
The manufacturer has no responsibility for damage caused by unsuitable use or by disrespecting the enclosed working instructions.

The above information is believed to be current and accurate; however, Bertin Technologies makes no warranty with respect to such information and assumes no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

Contact: tech@bertin-bioreagent.com

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

* Data compared to the previous version altered.
1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: Ellman's Reagent 50

Article number: A09000_50

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

No further relevant information available.

Application of the substance / the mixture Laboratory reagent

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Bertin Technologies
10 bis avenue Ampère F-78180 Montigny-le-Bx FRANCE
Tel: +33 1 39 30 60 36 - tech@bertin-bioreagent.com

Further information obtainable from: Technical Support of Bioreagent Department

1.4 Emergency telephone number: During operating hours 09 am to 05 pm (Paris Time GMT+1) : +33 139 306 036

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

GHS07

Acute Tox. 4 H302 Harmful if swallowed.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms

![GHS07]

Signal word Warning

Hazard-determining components of labelling:
2-acetylthioethyltrimethylammonium iodide

Hazard statements
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements
P280 Wear protective gloves / eye protection / face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see on this label).
P332+P313 If skin irritation occurs: Get medical advice/attention.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)
2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:
- CAS: 1866-15-5 2-acetylthioethyltrimethylammonium iodide 2.5-10%
- EINECS: 217-472-0 Acute Tox. 3, H301; Acute Tox. 3, H311; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335
- CAS: 69-78-3 3,3’-dithiobis[6-nitrobenzoic] acid 2.5-10%
- EINECS: 200-714-4 Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335

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

4 First aid measures

4.1 Description of first aid measures
General information: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
After inhalation: In case of unconsciousness place patient stably in side position for transportation.
After skin contact: Immediately wash with water and soap and rinse thoroughly.
After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After swallowing: Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture No further relevant information available.

5.3 Advice for firefighters
Protective equipment: No special measures required.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Not required.
6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
6.3 Methods and material for containment and cleaning up: Pick up mechanically.
6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
7 Handling and storage

7.1 Precautions for safe handling  No special precautions are necessary if used correctly.
Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility: Not required.
Further information about storage conditions: Keep container tightly sealed.
Recommended storage temperature: -20 °C

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

8 Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters
Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls
Personal protective equipment:
General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
Respiratory protection: Not required.
Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and
varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the
glove material can not be calculated in advance and has therefore to be checked prior to the application.
Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information
Appearance:
- Form: Solid
- Colour: Light yellow
- Odour: Odourless
- Odour threshold: Not determined.

pH-value: Not applicable.

Change in condition
- Melting point/freezing point: Undetermined.
- Initial boiling point and boiling range: 1,461 °C

Flash point: Not applicable.

Flammability (solid, gas):
- Flammability (solid, gas): Not determined.

Ignition temperature:
- Decomposition temperature: Not determined.
- Auto-ignition temperature: Product is not selfigniting.

Explosion properties:
- Explosive properties: Product does not present an explosion hazard.
- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.
- Vapour pressure: Not applicable.
- Density: Not determined.
- Relative density: Not determined.
- Vapour density: Not applicable.
- Evaporation rate: Not applicable.

Solubility in / Miscibility with water: Soluble.

Partition coefficient: n-octanol/water: Not determined.

Viscosity:
- Dynamic: Not applicable.
- Kinematic: Not applicable.

Solvent content:
- Solids content: 100.0 %

9.2 Other information
No further relevant information available.
10 Stability and reactivity

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

11 Toxicological information

11.1 Information on toxicological effects
   Acute toxicity
   Harmful if swallowed.
   LD/LC50 values relevant for classification:
   CAS: 1866-15-5 2-acetylthioethyltrimethylammonium iodide
   Oral  LD50  100 mg/kg (rat)
   Dermal LD50  500 mg/kg (guinea pig)
   CAS: 69-78-3 3,3'-dithiobis[6-nitrobenzoic] acid
   LD50 Intraperitoneal 2,080 mg/kg (mouse)
   Primary irritant effect:
   Skin corrosion/irritation
   Causes skin irritation.
   Serious eye damage/irritation
   Causes serious eye irritation.
   Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
   CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
   Germ cell mutagenicity Based on available data, the classification criteria are not met.
   Carcinogenicity Based on available data, the classification criteria are not met.
   Reproductive toxicity Based on available data, the classification criteria are not met.
   STOT-single exposure Based on available data, the classification criteria are not met.
   STOT-repeated exposure Based on available data, the classification criteria are not met.
   Aspiration hazard Based on available data, the classification criteria are not met.

12 Ecological information

12.1 Toxicity
   Aquatic toxicity: No further relevant information available.
12.2 Persistence and degradability No further relevant information available.
12.3 Bioaccumulative potential No further relevant information available.
12.4 Mobility in soil No further relevant information available.
   Additional ecological information:
   General notes:
   Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
   Do not allow product to reach ground water, water course or sewage system, even in small quantities.
   Danger to drinking water if even extremely small quantities leak into the ground.
   12.5 Results of PBT and vPvB assessment
   PBT: Not applicable.
   vPvB: Not applicable.
12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods
Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue
HP 6 Acute Toxicity

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.
Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

14.1 UN-Number
ADR, ADN, IMDG, IATA not regulated

14.2 UN proper shipping name
ADR, ADN, IMDG, IATA not regulated

14.3 Transport hazard class(es)
ADR, ADN, IMDG, IATA
Class not regulated

14.4 Packing group
ADR, IMDG, IATA not regulated

14.5 Environmental hazards:
Not applicable.

14.6 Special precautions for user
Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.

Transport/Additional information:

IATA
Remarks: When sold in quantities of less than or equal to 1mL or 1g with an Excepted Quantity Code of E1, E2, E3, E4 or E5, this item meets the De Minimis Quantites exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity

UN "Model Regulation": not regulated

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients is listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.
Trade name: Ellman's Reagent 50

16 Other information

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

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This product is designed for Research and Development use only. Not for drug for human nor veterinary or other uses. The manufacturer has no responsibility for damage caused by unsuitable use or by disrespecting the enclosed working instructions.

The above information is believed to be current and accurate; however, Bertin Technologies makes no warranty with respect to such information and assumes no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

Relevant phrases
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Department issuing SDS: Technical Support of Bioreagent Department
Contact: tech@bertin-bioreagent.com

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

* Data compared to the previous version altered.