



# Safety Data Sheet

This safety data sheet was created pursuant to the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 2021-02-08

Revision Number 5

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Product Code** ST1312  
**Product Name** Strandase A Buffer (10X)  
**EC No** 231-791-2  
**CAS-No** 7732-18-5

Contains ProClin 300

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

**Identified uses** No information available  
**Uses advised against** No information available

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

#### Supplier

USA:

Takara Bio USA, Inc.  
1290 Terra Bella Avenue  
Mountain View, CA 94043  
Phone: 800.662.2566/888.251.6618  
Web: www.takarabio.com

Europe:

Takara Bio Europe S.A.S.  
34, Rue de la Croix de Fer  
78100 Saint-Germain-en-Laye France  
Phone: +33 1 39 04 68 80  
Web: www.takarabio.com

Europe:

Takara Bio Europe AB  
Arvid Wallgrens Backe 20,  
SE-413 46 Goteborg, Sweden  
Phone: +46 31 758 09 00  
Web: www.takarabio.com

India:

DSS Takara Bio India Pvt. Ltd.  
A-5 Mohan Co-operative Industrial Estate, Mathura Road,  
New Delhi 110044, India  
Phone: +91 11 30886717

For further information, please contact:

### 1.4. Emergency telephone number

Emergency telephone In case of emergency, call PERS (Professional Emergency Resource Services)

1-800-633-8253 (US) or 801-629-0667 (international).

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin sensitization

Category 1 - (H317)

### 2.2. Label elements

Contains ProClin 300



#### Signal word

Warning

#### Hazard statements

H317 - May cause an allergic skin reaction

#### Precautionary Statements - EU (§28, 1272/2008)

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P280 - Wear protective gloves

P321 - Specific treatment (see .? on this label)

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P362 + P364 - Take off contaminated clothing and wash it before reuse

P501 - Dispose of contents/ container to an approved waste disposal plant

### 2.3. Other hazards

No information available.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

| Chemical name             | Weight-% | REACH registration number | EC No | Classification according to Regulation (EC) No. 1272/2008 [CLP]  | Specific concentration limit (SCL)  | M-Factor | M-Factor (long-term) |
|---------------------------|----------|---------------------------|-------|--|---|----------|----------------------|
| ProClin 300<br>55965-84-9 | < 0.1    | No data available         | -     | Acute Tox. 3 (H301)<br>Acute Tox. 2 (H310)<br>Acute Tox. 2 (H330)<br>Skin Corr. 1C (H314)<br>Eye Dam. 1 (H318)<br>Skin Sens. 1A (H317)<br>(EUH071)<br>Aquatic Acute 1<br>(H400)<br>Aquatic Chronic 1 | Skin Sens. 1 ::<br>C>=0.0015%<br>Skin Corr. 1B ::<br>C>=0.6%<br>Skin Irrit. 2 ::<br>0.06%<=C<0.6%<br>%<br>Eye Irrit. 2 ::<br>0.06%<=C<0.6%<br>% | 100      | 100                  |

|  |  |  |  |        |  |  |  |
|--|--|--|--|--------|--|--|--|
|  |  |  |  | (H410) |  |  |  |
|--|--|--|--|--------|--|--|--|

**Full text of H- and EUH-phrases: see section 16**

Acute Toxicity Estimate  
No information available

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## SECTION 4: First aid measures

**4.1. Description of first aid measures**

|                       |  |
|-----------------------|--|
| <b>General advice</b> | Show this safety data sheet to the doctor in attendance.   |
| <b>Inhalation</b>     | Remove to fresh air.   |
| <b>Eye contact</b>    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.                 |
| <b>Skin contact</b>   | Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician. |
| <b>Ingestion</b>      | Clean mouth with water and drink afterwards plenty of water.   |

**4.2. Most important symptoms and effects, both acute and delayed**

**Symptoms** Itching. Rashes. Hives.

**4.3. Indication of any immediate medical attention and special treatment needed**

**Note to physicians** May cause sensitization in susceptible persons. Treat symptomatically.

## SECTION 5: Firefighting measures

**5.1. Extinguishing media**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

**5.2. Special hazards arising from the substance or mixture**

**Specific hazards arising from the chemical** Product is or contains a sensitizer. May cause sensitization by skin contact.

**5.3. Advice for firefighters**

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**For emergency responders** Use personal protection recommended in Section 8.

### 6.2. Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

### 6.3. Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

### 6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

### 7.3. Specific end use(s)

**Identified uses**

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure Limits

| Chemical name             | European Union | Austria                                | Belgium   | Bulgaria | Croatia        |
|---------------------------|----------------|--|---|----------|----------------|
| ProClin 300<br>55965-84-9 | -              | TWA 0.05 mg/m <sup>3</sup><br>Sh/Sah** | -   | -        | -              |
| Chemical name             | Sweden         |  | Switzerland   |          | United Kingdom |
| ProClin 300<br>55965-84-9 | -              |  | SS-C**<br>S+<br>TWA 0.2 mg/m <sup>3</sup><br>STEL 0.4 mg/m <sup>3</sup> |          | -              |

#### Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Derived No Effect Level (DNEL)** No information available.  
**Predicted No Effect Concentration (PNEC)** No information available.

## 8.2. Exposure controls

### Personal Protective Equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**Physical state** Liquid  
**Appearance** Clear, colorless  
**Color** No information available  
**Odor** Odorless.  
**Odor Threshold** No information available

| <u>Property</u>                         | <u>Values</u>            | <u>Remarks • Method</u>  |
|---|--------------------------|--------------------------|
| <b>Melting point / freezing point</b>   | No data available        | None known               |
| <b>Boiling point/boiling range (°C)</b> | No data available        | None known               |
| <b>Flammability (solid, gas)</b>        | No data available        | None known               |
| <b>Flammability Limit in Air</b>        |                          | None known               |
| <b>Upper flammability limit:</b>        | No data available        |                          |
| <b>Lower flammability limit:</b>        | No data available        |                          |
| <b>Flash point</b>                      | No data available        | Open cup                 |
| <b>Autoignition temperature</b>         | No data available        | None known               |
| <b>Decomposition temperature</b>        |                          | None known               |
| <b>pH</b>                               |                          | None known               |
| <b>pH (as aqueous solution)</b>         | No data available        | No information available |
| <b>Kinematic viscosity</b>              | No data available        | None known               |
| <b>Dynamic Viscosity</b>                | No data available        | None known               |
| <b>Water solubility</b>                 | No data available        | None known               |
| <b>Solubility in other solvents</b>     | No data available        | None known               |
| <b>Partition coefficient</b>            | No data available        | None known               |
| <b>Vapor pressure</b>                   | No data available        | None known               |
| <b>Relative density</b>                 |                          | None known               |
| <b>Bulk Density</b>                     | No data available        |                          |
| <b>Liquid Density</b>                   | No data available        |                          |
| <b>Vapor density</b>                    | No data available        | None known               |
| <b>Particle characteristics</b>         |                          |                          |
| <b>Particle Size</b>                    | No information available |                          |
| <b>Particle Size Distribution</b>       | No information available |                          |

### 9.2. Other information

9.2.1. Information with regard to physical hazard classes  
Not applicable

9.2.2. Other safety characteristics  
No information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity** No information available.

### 10.2. Chemical stability

**Stability** Stable under normal conditions.

#### **Explosion Data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** None under normal processing.

### 10.4. Conditions to avoid

**Conditions to avoid** None known based on information supplied.

### 10.5. Incompatible materials

**Incompatible materials** None known based on information supplied.

### 10.6. Hazardous decomposition products

**Hazardous Decomposition Products** None known based on information supplied.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Information on likely routes of exposure

##### **Product Information**

**Inhalation** Specific test data for the substance or mixture is not available.

**Eye contact** Specific test data for the substance or mixture is not available.

**Skin contact** May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components).

**Ingestion** Specific test data for the substance or mixture is not available.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Itching. Rashes. Hives.

#### Numerical measures of toxicity

##### **Acute toxicity**

**Component Information**

| Chemical name | Oral LD50          | Dermal LD50 | Inhalation LC50 |
|---------------|--------------------|-------------|-----------------|
| ProClin 300   | = 53 mg/kg ( Rat ) | -           | -               |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

|  |  |
|--|--|
| <b>Skin corrosion/irritation</b>         | No information available.                |
| <b>Serious eye damage/eye irritation</b> | No information available.                |
| <b>Respiratory or skin sensitization</b> | May cause sensitization by skin contact. |
| <b>Germ cell mutagenicity</b>            | No information available.                |
| <b>Carcinogenicity</b>                   | No information available.                |
| <b>Reproductive toxicity</b>             | No information available.                |
| <b>STOT - single exposure</b>            | No information available.                |
| <b>STOT - repeated exposure</b>          | No information available.                |
| <b>Aspiration hazard</b>                 | No information available.                |

**11.2. Information on other hazards****11.2.1. Endocrine disrupting properties**

**Endocrine disrupting properties** No information available.

**11.2.2. Other information**

**Other adverse effects** No information available.

|   |
|---|
| <b>SECTION 12: Ecological information</b> |
|---|

**12.1. Toxicity****Ecotoxicity**

**Unknown aquatic toxicity** Contains 0.41467 % of components with unknown hazards to the aquatic environment.

| Chemical name | Algae/aquatic plants   | Fish  | Toxicity to microorganisms | Crustacea   |
|---------------|--|---|----------------------------|---|
| ProClin 300   | 0.03 - 0.13: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 0.11 - 0.16: 72 h Pseudokirchneriella | 1.6: 96 h Oncorhynchus mykiss mg/L LC50 semi-static | -                          | 0.12 - 0.3: 48 h Daphnia magna mg/L EC50 Flow through 0.71 - 0.99: 48 h Daphnia magna mg/L EC50 Static 4.71: 48 h |

|  |                              |  |  |                         |
|--|------------------------------|--|--|-------------------------|
|  | subcapitata mg/L EC50 static |  |  | Daphnia magna mg/L EC50 |
|--|------------------------------|--|--|-------------------------|

**12.2. Persistence and degradability**

**Persistence and degradability** No information available.

**12.3. Bioaccumulative potential**

**Bioaccumulation** There is no data for this product.

**Component Information**

| Chemical name | Partition coefficient |
|---------------|-----------------------|
| ProClin 300   | 0.75                  |

**12.4. Mobility in soil**

**Mobility in soil** No information available.

**12.5. Results of PBT and vPvB assessment**

**PBT and vPvB assessment** No information available.

**12.6. Endocrine disrupting properties**

**Endocrine disrupting properties** No information available.

**12.7. Other adverse effects**

No information available.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

## SECTION 14: Transport information

**IATA**

14.1 UN number or ID number Not regulated  
 14.2 UN proper shipping name No information available  
 14.3 Transport hazard class(es) Not regulated  
 14.4 Packing group Not regulated  
 14.5 Environmental hazards Not applicable  
 14.6 Special precautions for user  
 Special Provisions None

**IMDG**

14.1 UN number or ID number Not regulated  
 14.2 UN proper shipping name No information available  
 14.3 Transport hazard class(es) Not regulated  
 14.4 Packing group Not regulated  
 14.5 Environmental hazards Not applicable  
 14.6 Special precautions for user  
 Special Provisions None



14.7 Maritime transport in bulk according to IMO instruments No information available

**RID**

14.1 UN number or ID number Not regulated  
 14.2 UN proper shipping name No information available  
 14.3 Transport hazard class(es) Not regulated  
 14.4 Packing group Not regulated  
 14.5 Environmental hazards Not applicable  
 14.6 Special precautions for user  
 Special Provisions None

**ADR**

14.1 UN number or ID number Not regulated  
 14.2 UN proper shipping name No information available  
 14.3 Transport hazard class(es) Not regulated  
 14.4 Packing group Not regulated  
 14.5 Environmental hazards Not applicable  
 14.6 Special precautions for user  
 Special Provisions None

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

**Authorizations and/or restrictions on use:**

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

**Persistent Organic Pollutants**

Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**

Not applicable

**International Inventories**

TSCA -  
 DSL/NDSL -  
 EINECS/ELINCS -  
 ENCS -  
 IECSC -  
 KECL -  
 PICCS -  
 AICS -

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

### 15.2. Chemical safety assessment

**Chemical Safety Assessment** No information available

## SECTION 16: Other information

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Full text of H-Statements referred to under section 3

EUH071 - Corrosive to the respiratory tract  
 H301 - Toxic if swallowed  
 H310 - Fatal in contact with skin  
 H314 - Causes severe skin burns and eye damage  
 H317 - May cause an allergic skin reaction  
 H318 - Causes serious eye damage  
 H330 - Fatal if inhaled  
 H400 - Very toxic to aquatic life  
 H410 - Very toxic to aquatic life with long lasting effects

#### Legend

SVHC: Substances of Very High Concern for Authorization:

#### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA Time weighted average STEL Short term exposure limit  
 Ceiling Maximum limit value \* Skin designation

| Classification procedure  |                    |
|---|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used        |
| Acute oral toxicity   | Calculation method |
| Acute dermal toxicity   | Calculation method |
| Acute inhalation toxicity - gas                                 | Calculation method |
| Acute inhalation toxicity - vapor                               | Calculation method |
| Acute inhalation toxicity - dust/mist                           | Calculation method |
| Skin corrosion/irritation                                       | Calculation method |
| Serious eye damage/eye irritation                               | Calculation method |
| Respiratory sensitization                                       | Calculation method |
| Mutagenicity  | Calculation method |
| Carcinogenicity   | Calculation method |
| Reproductive toxicity   | Calculation method |
| STOT - single exposure  | Calculation method |
| STOT - repeated exposure  | Calculation method |
| Acute aquatic toxicity  | Calculation method |
| Chronic aquatic toxicity  | Calculation method |
| Aspiration hazard   | Calculation method |
| Ozone   | Calculation method |

#### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

Revision Date 2021-02-08

**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**Disclaimer**

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**End of Safety Data Sheet**