Safety Data Sheet



Revision Date 2021-02-06 Revision Number 8

1. Identification

Product identifier

Product Name Standard

Other means of identification

Product Code SD3107

UN number or ID number UN3077

Synonyms No information available

Recommended use of the chemical and restrictions on use

Identified uses No information available

Restrictions on use No information available

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

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).

2. Hazard(s) identification

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Danger

Hazard statements

Harmful if swallowed
Toxic in contact with skin

Toxic if inhaled

Causes severe skin burns and eye damage

May cause an allergic skin reaction



Appearance Lyophilized cake

Physical state Solid

Odor Odorless

Precautionary Statements - Prevention

Do not eat, drink or smoke when using this product

Use only outdoors or in a well-ventilated area

Do not breathe dusts or mists

Wash face, hands and any exposed skin thoroughly after handling

Contaminated work clothing must not be allowed out of the workplace

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Specific treatment (see .? on this label)

Immediately call a POISON CENTER or doctor

Specific treatment (see .? on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor

Call a POISON CENTER or doctor if you feel unwell

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

If skin irritation or rash occurs: Get medical advice/attention

Wash contaminated clothing before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Immediately call a POISON CENTER or doctor

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

Rinse mouth

Do NOT induce vomiting

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Unknown acute toxicity

24.6999 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

24.6999 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

24.6999 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Other information

Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Trade secret
ProClin 300	55965-84-9	5 - 10	*
Potassium chloride	7447-40-7	1 - 5	*

4. First-aid measures

Description of first aid measures

General advice Immediate medical attention is required. Show this safety data sheet to the doctor in

attendance.

Inhalation Delayed pulmonary edema may occur. Get immediate medical advice/attention. If breathing

has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained

personnel should) give oxygen.

Eye contact Get immediate medical advice/attention. Rinse immediately with plenty of water, also under

the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.

Skin contactWash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get immediate medical advice/attention. May cause an allergic skin

reaction.

Ingestion Get immediate medical advice/attention. Do NOT induce vomiting. Clean mouth with water

and drink afterwards plenty of water. Never give anything by mouth to an unconscious

person.

Self-protection of the first aider

Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the

material(s) involved, take precautions to protect themselves and prevent spread of contamination. Do not breathe dust. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective

equipment as required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation. Itching. Rashes. Hives. Coughing and/ or wheezing. Difficulty in

breathing.

Indication of any immediate medical attention and special treatment needed

Note to physicians Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. May cause

sensitization in susceptible persons. Treat symptomatically.

5. Fire-fighting measures

surrounding environment.

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

Unsuitable extinguishing mediaDo not scatter spilled material with high pressure water streams.

Specific hazards arising from the The product causes burns of eyes, skin and mucous membranes. Thermal decomposition

can lead to release of irritating gases and vapors. Product is or contains a sensitizer. May

chemical

cause sensitization by skin contact.

Explosion Data

Sensitivity to mechanical impact None.

Sensitivity to static discharge

None.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Attention! Corrosive material. Ensure adequate ventilation. Avoid contact with skin, eyes or

clothing. Avoid generation of dust. Do not breathe dust. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of

spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

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

Pick up and transfer to properly labeled containers. Methods for cleaning up

7. Handling and storage

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. Do not breathe dust. Avoid generation of dust. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product.

Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Protect from moisture. Store away from other materials. Keep containers tightly closed in a

dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

8. Exposure controls/personal protection

Control parameters

Appropriate engineering controls

Engineering controls Showers

Evewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Face protection shield. Tight sealing safety goggles.

Hand protection Impervious gloves. Wear suitable gloves.

Skin and body protectionLong sleeved clothing. Chemical resistant apron. Wear suitable protective clothing.

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Remove and wash contaminated clothing and gloves, including the inside, before re-use.

Avoid contact with skin, eyes or clothing. Do not breathe dust. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Contaminated work clothing should not be

allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid

Appearance Lyophilized cake
Color No information available

Odor Odorless

Odor Threshold No information available

Property Values Remarks • Method

None known pН No data available Melting point / freezing point None known Boiling point/boiling range (°C) No data available None known Flash point No data available Open cup **Evaporation Rate** no data available None known Flammability (solid, gas) no data available None known

Flammability Limit in Air None known

Upper flammability limit: No data available Lower flammability limit: No data available

Vapor pressureno data availableNone knownVapor densityNo data availableNone known

Relative density

None known

Water solubilityNo data availableNone knownSolubility in other solventsno data availableNone knownPartition coefficientno data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNo data availableNone known

Kinematic viscosity

No data available

None known

no data available

None known

Other information

Explosive properties

Oxidizing properties

No information available
VOC Content (%)
Liquid Density

No information available
Bulk Density

No information available

10. Stability and reactivity

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to Avoid Exposure to air or moisture over prolonged periods. Excessive heat.

Incompatible materials Acids. Bases. Oxidizing agent.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Corrosive by inhalation. Inhalation of corrosive fumes/gases may cause coughing, choking,

headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. Specific test data for the substance or mixture is not

available. Toxic by inhalation. (based on components).

Eye contact (based on components). Corrosive to the eyes and may cause severe damage including

blindness. Specific test data for the substance or mixture is not available. Causes serious

eye damage. May cause irreversible damage to eyes.

Skin contact Prolonged skin contact causes burns. Symptoms may be delayed. May cause irritation.

May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Specific test data for the substance or mixture is

not available. Toxic in contact with skin. (based on components).

Ingestion Causes burns. Ingestion causes burns of the upper digestive and respiratory tracts. May

cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Specific test data for

the substance or mixture is not available. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. Itching. Rashes. Hives. Coughing and/ or

wheezing. Difficulty in breathing.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 902.60 mg/kg
ATEmix (dermal) 617.30 mg/kg
ATEmix (inhalation-dust/mist) 0.618 mg/l

Unknown acute toxicity

24.6999 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

24.6999 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

24.6999 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

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

55965-84-9			
Potassium chloride	= 2600 mg/kg (Rat)	-	-
7447-40-7			

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

Skin corrosion/irritation Prolonged skin contact causes burns.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes burns. Risk of serious

damage to eyes.

Respiratory or skin sensitization May cause sensitization by skin contact.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard

Other adverse effects

No information available.

Interactive effects

No information available.

12. Ecological information

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
ProClin 300 55965-84-9	0.03 - 0.13: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 0.11 - 0.16: 72 h Pseudokirchneriella subcapitata mg/L EC50 static	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 Daphnia magna mg/L EC50
Potassium chloride 7447-40-7	2500: 72 h Desmodesmus subspicatus mg/L EC50	750 - 1020: 96 h Pimephales promelas mg/L LC50 static 1060: 96 h Lepomis macrochirus mg/L LC50 static	-	825: 48 h Daphnia magna mg/L EC50 83: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
ProClin 300	0.75
55965-84-9	

Other adverse effects No information available.

13. Disposal considerations

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.

14. Transport information

DOT

UN number or ID number UN3077

Proper shipping name Environmentally hazardous substance, solid, n.o.s.

Transport hazard class(es) Packing group

Special Provisions 146, 335, A112, B54, B120, IB8, IP3, N20, N91, T1, TP33, 8

DOT Marine Pollutant NP

Marine pollutant ProClin 300

Description UN3077, Environmentally hazardous substance, solid, n.o.s. (ProClin 300), 9, III, Marine

Pollutant

Emergency Response Guide

Number

171

TDG

UN number or ID number

UN proper shipping name Environmentally hazardous substance, solid, n.o.s.

Transport hazard class(es) Packing group Ш **Special Provisions** 16, 99 Marine pollutant ProClin 300.

Description UN3077, Environmentally hazardous substance, solid, n.o.s. (ProClin 300), 9, III

MEX

UN number or ID number UN3077

UN proper shipping name Environmentally hazardous substance, solid, n.o.s.

Transport hazard class(es) Packing group

Technical Name { TCODE="TNX"} : { COMP="'55965-84-9', 'MC02167'"}

Description UN3077, Environmentally hazardous substance, solid, n.o.s. (ProClin 300), 9, III

Special Provisions 274, 331, 335

ICAO (air)

UN number or ID number UN3077

Environmentally hazardous substance, solid, n.o.s. **UN proper shipping name**

Transport hazard class(es) Packing group Ш

Description UN3077, Environmentally hazardous substance, solid, n.o.s. (ProClin 300), 9, III

Special Provisions A158, A97, A179, A197

IATA

UN number or ID number UN3077

UN proper shipping name Environmentally hazardous substance, solid, n.o.s.

Transport hazard class(es) 9
Packing group |||

Technical Name ProClin 300

Description UN3077, Environmentally hazardous substance, solid, n.o.s. (ProClin 300), 9, III

Special Provisions A158, A179, A97, A197

ERG Code 9L

IMDG

UN number or ID number UN3077

UN proper shipping name Environmentally hazardous substance, solid, n.o.s.

Transport hazard class(es) 9
Packing group III
EmS-No F-A, S-F

Special Provisions 274, 335, 966, 967, 969

Marine pollutant P

Marine Pollutant ProClin 300

Description UN3077, Environmentally hazardous substance, solid, n.o.s. (ProClin 300), 9, III, Marine

Pollutant

RID

UN number or ID number UN3077

UN proper shipping name Environmentally hazardous substance, solid, n.o.s.

Transport hazard class(es) 9
Packing group III
Classification code M7

Special Provisions 274, 335, 375, 601

Description UN3077, Environmentally hazardous substance, solid, n.o.s. (ProClin 300), 9, III

<u>ADR</u>

UN number or ID number UN3077

UN proper shipping name Environmentally hazardous substance, solid, n.o.s.

Transport hazard class(es)

Packing group

Classification code

Tunnel restriction code

(-)

Special Provisions 274, 335, 601, 375

Description UN3077, Environmentally hazardous substance, solid, n.o.s. (ProClin 300), 9, III, (-)

ADN

UN number or ID number UN3077

UN proper shipping name Environmentally hazardous substance, solid, n.o.s.

Transport hazard class(es) 9
Packing group III
Classification code M7

Special Provisions 274, 335, 375, 601

Description UN3077, Environmentally hazardous substance, solid, n.o.s. (ProClin 300), 9, III

Equipment Requirements A, PP

15. Regulatory information

International Inventories

TSCA -.

*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

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

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16.	Otner	Into	rmatio	n

NFPA Health hazards 3 Flammability 0 Instability 0 Special hazards - Health hazards 3 Flammability 0 Physical hazards 0 Personal protection X

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

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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 2021-02-06

Revision NoteNo information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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End of Safety Data Sheet