

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 2021-02-06

Revision Number 5

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

1.1. Product identifier	
Product Code	

SD0944

Product Name Control Vector (pUC118/Hind III/BAP)

EC No

231-791-2

CAS-No 7732-18-5

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

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP] Hazard statements This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

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 >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove to fresh air.		
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.		
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.		
Ingestion	Clean mouth with water and drink afterwards plenty of water.		
4.2. Most important symptoms and effects, both acute and delayed			
Symptoms	No information available.		
4.3. Indication of any immediate medical attention and special treatment needed			
Note to physicians	Treat symptomatically.		

	SECTION E. Firefighting managemen	
	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	he substance or mixture	
Specific hazards arising from the chemical	No information available.	
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, protecti	ve equipment and emergency procedures	
Personal precautions	Ensure adequate ventilation.	
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 contact	ainment 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		
	SECTION 7: Handling and storage	
7.1. Precautions for safe handling		
7.1. Precautions for safe handling Advice on safe handling		
_	_	
Advice on safe handling	Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice.	

7.3. Specific end use(s)

Identified uses

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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

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) Predicted No Effect Concentration (PNEC)	No information available. No information available.
8.2. Exposure controls	
Personal Protective Equipment	
Eye/face protection	No special protective equipment required.
Skin and body protection	No special protective equipment required.
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	Clear	
Odor	Odorless.	
Odor Threshold	No information available	
Property_	Values_	Remarks • Method
Melting point / freezing point	No data available	None known
Boiling point/boiling range (°C)	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	
Flash point	No data available	Open cup
Autoignition temperature	No data available	None known
Decomposition temperature		None known
рН		None known
pH (as aqueous solution)	No data available	No information available
Kinematic viscosity	No data available	None known
Dynamic Viscosity	No data available	None known
Water solubility	No data available	None known

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Solubility in other solvents Partition coefficient Vapor pressure Relative density Bulk Density Liquid Density Vapor density Particle characteristics Particle Size Particle Size Particle Size Distribution	No data available No data available No data available No data available No data available No data available No information available No information available	None known None known None known None known	
9.2. Other information			
9.2.1. Information with regard to ph Not applicable	ysical hazard classes		
9.2.2. Other safety characteristics No information available			
	SECTION 10: Stability and	I 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 react	ions		
Possibility of hazardous reactions	None under normal processing.		
10.4. Conditions to avoid			
Conditions to avoid	None known based on information su	pplied.	
10.5. Incompatible materials			
Incompatible materials	None known based on information su	pplied.	
10.6. Hazardous decomposition products			
Hazardous Decomposition Products None known based on information supplied.			
SECTION 11, Toxicological information			
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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	Specific test data for the substance or mixture is not available.

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Ingestion	Specific test data for the substance or mixture is not available	able.
Symptoms related to the physical,	chemical and toxicological characteristics	
Symptoms	No information available.	
Numerical measures of toxicity		
Acute toxicity		
Delayed and immediate offects as	uall as always affects from allow and lowe town any	
-	well as chronic effects from short and long-term exposu	<u>re</u>
Skin corrosion/irritation	No information available.	
Serious eye damage/eye irritation	No information available.	
Respiratory or skin sensitization	No information available.	
Germ cell mutagenicity	No information available.	
0		
Carcinogenicity	No information available.	

- No information available. Reproductive toxicity
- No information available. STOT - single exposure
- STOT repeated exposure No information available.
- Aspiration hazard 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.

SECTION 12: Ecological information

12.1.	Toxicity	

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Unknown aquatic toxicity Contains 0.84274 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability			
Persistence and degradability	No information available.		
12.3. Bioaccumulative potential			
Bioaccumulation	No information available.		
<u>12.4. Mobility in soil</u>			
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 No information available 14.2 UN proper shipping name 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 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)
- 14.4 Packing group
- 14.5 Environmental hazards 14.6 Special precautions for user **Special Provisions**
- 14.7 Maritime transport in bulk according to IMO instruments

RID

14.1 UN number or ID number 14.2 UN proper shipping name Not regulated No information available Not regulated Not regulated Not applicable

None No information available

Not regulated 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

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWĂ	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		
Skin 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

2021-02-06

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

Disclaimer

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End of Safety Data Sheet