Safety Data Sheet

Revision Date 2021-02-07

| <u> </u> | _ |
|----------|-------|
| 圓 | |
| (181) | КА |
| | |
| | |

Revision Number 4

| | 1. Identification | |
|---|---------------------------|--|
| Product identifier | | |
| Product Name | AAV Extraction Solution B | |
| Other means of identification | | |
| Product Code | SD5028 | |
| 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

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Appearance Clear, colorless

Physical state Liquid

Odor Odorless

Other information

No information available.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

The product contains no substances which at their given concentration, are considered to be hazardous to health

4. First-aid measures

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. | |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. | |
| Most important symptoms and effects, both acute and delayed | | |
| Symptoms | No information available. | |
| Indication of any immediate medical attention and special treatment needed | | |
| Note to physicians | Treat symptomatically. | |

5. Fire-fighting measures

| 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. | |
| Specific hazards arising from the chemical | No information available. | |
| 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, protecti | ve equipment and emergency procedures | |
| Personal precautions | Ensure adequate ventilation. | |
| | | |
| Methods and material for conta | ainment and cleaning up | |
| Methods for containment | Prevent further leakage or spillage if safe to do so. | |
| Methods for cleaning up | Pick up and transfer to properly labeled containers. | |
| | | |
| 7. Handling and storage | | |
| Precautions for safe handling | | |
| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice. | |
| Conditions for safe storage, including any incompatibilities | | |
| Storage Conditions | Keep container tightly closed in a dry and well-ventilated place. | |
| | | |
| | 9 Exposure controls/percent protection | |

8. Exposure controls/personal protection

Control parameters

| Appropriate engineering controls | | |
|---|--|--|
| Engineering controls | Showers Eyewash stations Ventilation systems. | |
| Individual protection measures, such as 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. | |

9. Physical and chemical properties

| Information on basic physical and chemical properties | | |
|---|------------------|--|
| Physical state | Liquid | |
| Appearance | Clear, colorless | |
| Color | Clear | |

| Odor Odor Threshold | Odorless No information available | |
|----------------------------------|--------------------------------------|------------------|
| | | |
| Property | Values | Remarks • Method |
| рН | | None known |
| Melting point / freezing point | No data available | 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 pressure | no data available | None known |
| Vapor density | No data available | None known |
| Relative density | | None known |
| Water solubility | No data available | None known |
| Solubility in other solvents | no data available | None known |
| Partition coefficient | no data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic Viscosity | no data available | None known |
| Other information | | |
| Explosive properties | No information available | |
| Oxidizing properties | No information available | |
| Softening point | No information available | |
| Molecular Weight | No information available | |
| VOC Content (%) | No information available | |
| 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 | None known based on information supplied. |
| Incompatible materials | None known based on information supplied. |
| | |

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

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

Symptoms related to the physical, chemical and toxicological characteristics

SD5028 - AAV Extraction Solution B

| SD5028 - AAV Extraction Solut | tion B | Revision Date 2021-0 |
|---|---|----------------------|
| Symptoms | No information available. | |
| Acute toxicity | | |
| Numerical measures of toxicity | | |
| The following values are calculated ATEmix (oral) | a based on chapter 3.1 of the GHS document 24,352.00 mg/kg | |
| Delayed and immediate effects as | vell as chronic effects from short and long-term exposu | ure |
| 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. | |
| Carcinogenicity | No information available. | |
| Reproductive toxicity | No information available. | |
| STOT - single exposure | No information available. | |
| STOT - repeated exposure | No information available. | |
| Aspiration hazard | No information available. | |
| Other adverse effects | No information available. | |
| Interactive effects | No information available. | |
| | 12. Ecological information | |
| Ecotoxicity | The environmental impact of this product has not been fu | Ily investigated. |
| Persistence and degradability | No information available. | |
| Bioaccumulation | There is no data for this product. | |
| 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 | Not regulated |
|------------|---------------|
| TDG | Not regulated |
| MEX | Not regulated |
| ICAO (air) | Not regulated |
| IATA | Not regulated |
| IMDG | Not regulated |
| <u>RID</u> | Not regulated |
| ADR | Not regulated |
| ADN | Not regulated |
| | |

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. Other information | | | | | | | |
|--|--------------------------------------|------------------------------|------------|-----------------------------------|-------|--|--|
| NFPA HMIS | Health hazards 0 Health hazards 0 | Flammability Flammability | | Instability 0 Physical hazards | 0 | Special hazards - Personal protection X | |
| Key or legend to abbreviations and acronyms used in the safety data sheet | | | | | | | |
| Legend Section 8 | 3: EXPOSURE CONTROLS/PE | ERSONAL PROTE | ECTION | | | | |
| TWA | Time weighted average | - | TEL | Short term ex | xposu | re limit | |
| Ceiling | Maximum limit value | * | | Skin designa | tion | | |
| Key literature references and sources for data used to compile the SDS Agency for Toxic Substances and Disease Registry (ATSDR) | | | | | | | |
| | I Protection Agency ChemView | | | | | | |
| | fety Authority (EFSA) | | | | | | |
| | al Protection Agency) | | | | | | |
| Acute Exposure Guideline Level(s) (AEGL(s)) | | | | | | | |
| U.S. Environmenta | I Protection Agency Federal Ins | secticide, Fungicic | de, and Ro | denticide Act | | | |
| U.S. Environmenta | I Protection Agency High Produ | uction Volume Che | emicals | | | | |
| 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 | 2021-02-07 |
|---------------|---------------------------|
| Revision Note | No 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.

Notice to Purchaser:

Our products are to be used for research purposes only. They may not be used for any other purpose, including, but not limited to, use in drugs, in vitro diagnostic purposes, therapeutics, or in humans. Our products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products or to provide a service to third parties without our prior written approval. Your use of this product is also subject to compliance with the licensing requirements described on the product's web page. It is your responsibility to review, understand and adhere to any restrictions imposed by these statements. All other marks are the property of their respective owners. Certain trademarks may not be registered in all jurisdictions.

End of Safety Data Sheet