

76029 - ArciTect™ High-Fidelity DNA Polymerase

Revision Date 07-Mar-2022 Revision Number 1.1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name ArciTect™ High-Fidelity DNA Polymerase

Other means of identification

Catalog Number 76029

Document Number DX23123

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory reagent

Details of the supplier of the safety data sheet

Manufacturer/Supplier

STEMCELL Technologies Canada Inc. Suite 500 - 1618 Station Street Vancouver, British Columbia V6A 1B6 Canada

Emergency telephone number

Emergency Telephone 1-800-667-0322

2. HAZARDS 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

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)



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

Appearance Clear Physical state Liquid Odor No data available

Other Information

Not applicable

Unknown acute toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

<u>Mixture</u>

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

| Title a nazarabab basianob or mixtarb abbraing to the blobaily namionized bytein (brie) | | | | | |
|---|---------|----------|--|--|--|
| Chemical name | CAS No. | Weight-% | | | |
| Glycerol | 56-81-5 | 50 | | | |

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

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.



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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

5. FIRE-FIGHTING MEASURES

surrounding environment.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

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, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

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 Pick up and transfer to properly labeled containers.



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

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 Store in accordance with information listed on the Product Information Sheet (PIS).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------|-------------------|--|------------|
| Glycerol | No data available | TWA: 15 mg/m ³ mist, total | - |
| 56-81-5 | | particulate | |
| | | TWA: 5 mg/m³ mist, respirable | |
| | | fraction | |
| | | (vacated) TWA: 10 mg/m ³ | |
| | | mist, total particulate | |
| | | (vacated) TWA: 5 mg/m ³ mist, | |
| | | respirable fraction | |

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 protectionNo special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are



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

None known

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

Color No information available

Odor No data available
Odor threshold No data available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

No data available рΗ None known No data available Melting point / freezing point None known Boiling point / boiling range No data available None known Flash point No data available None known **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

Vapor density No data available None known Relative density No data available None known No data available Water solubility None known Solubility in other solvents No data available None known No data available Partition coefficient None known No data available None known **Autoignition temperature Decomposition temperature** No data available None known Kinematic viscosity No data available None known **Dynamic viscosity** No data available None known

Explosive properties No data available
Oxidizing properties No information available

Other Information

Softening point
Molecular weight
Molecular formula
VOC Content (%)
Liquid Density
No information available

10. STABILITY AND REACTIVITY



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Reactivity No information available.

Chemical stability Stable under recommended transport or storage conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoidNone known based on information supplied.

Incompatible materialsNone known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

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.

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

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Numerical measures of toxicity

Acute toxicity

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

ATEmix (oral) 25,200.00 mg/kg **ATEmix (dermal)** 20,020.00 mg/kg

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Product Information

Component Information



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| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------|---------------------|-------------------|---------------------|
| Glycerol | = 12600 mg/kg (Rat) | > 10 g/kg(Rabbit) | > 570 mg/m³(Rat)1 h |
| 56-81-5 | | | |

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

Skin corrosion/irritation No information available.

Product Information

No information available.

Product Information

Serious eye damage/eye irritation

Respiratory or skin sensitization No information available.

Product Information

Germ cell mutagenicity No information available.

Product Information

No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

Product Information

STOT - single exposure No information available.

Product Information

STOT - repeated exposure No information available.

Product Information

Target organ effects kidney, Respiratory system, Eyes, Skin.

Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

| Product Information | | | | |
|---------------------|------------------------|--------------------------|------------------------|----------------------|
| Chemical name | Algae/aquatic plants | Fish | Toxicity to | Crustacea |
| | | | microorganisms | |
| Glycerol | EC0 (Scenedesmus | LC50: >100 mg/L | EC0 (Pseudomonas | EC50: >500mg/L (24h, |
| 56-81-5 | quadricauda (Green | (Exposure time: | putida): > 10,000 mg/L | Daphnia magna) |
| | algae)): > 10,000 mg/L | 96h)Chronic toxicity: >1 | (Exposure time: 16 h) | |
| | | mg/L | | |

Persistence and degradability No information available.



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Bioaccumulation There is no data for this product.

Component Information

| Chemical name | Partition coefficient |
|---------------|-----------------------|
| Glycerol | log Pow: -2.66 |
| 56-81-5 | |

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

Not regulated DOT TDG Not regulated Not regulated **MEX** ICAO (air) Not regulated Not regulated IATA **IMDG** Not regulated <u>RID</u> Not regulated ADR Not regulated ADN Not regulated

15. REGULATORY INFORMATION

International Inventories



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Complies **TSCA** DSL/NDSL Complies Complies **EINECS/ELINCS** Does not comply **ENCS IECSC** Complies **KECL** Does not comply **PICCS** Complies Complies

Legend:

AICS

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

Acute health hazard No **Chronic Health Hazard** Nο Fire hazard Nο Sudden release of pressure hazard Nο **Reactive Hazard** No

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.



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U.S. State Right-to-Know Regulations

US State Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|---------------------|------------|---------------|--------------|
| Glycerol 56-81-5 | X | Х | X |
| Water 7732-18-5 | - | - | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Prepared By, Quality Control. STEMCELL Technologies Canada Inc.

Revision Date 07-Mar-2022

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. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product.

End of Safety Data Sheet