

Title: Synthetic Nucleic Acid - Safety Data Sheet	
Date: 04 June 2026	
Doc. No: ABIO-QMS-SDS-0054	REV: 0

Safety Data Sheet

Prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200.

1. IDENTIFICATION

1.1. Product identifier

Component: Synthetic nucleic acid

Other means of identification: Synthetic RNA controls; synthetic nucleic acid positive controls; molecular assay qualification panels; synthetic RNA panel members; synthetic DNA panel members; non-infectious nucleic acid reference materials

Application of the substance or mixture: For laboratory use.

This SDS applies to Aldatu Bioscience synthetic nucleic acid control materials and qualification panels composed of non-infectious synthetic RNA and/or synthetic DNA, supplied dried, lyophilized, frozen, or in aqueous solution. Covered materials may include positive controls, qualification panel members, assay reference templates, synthetic RNA transcripts, *in vitro* transcribed RNA, synthetic DNA fragments, synthetic gene fragments. This SDS does not apply to infectious materials, clinical specimens, extracted patient material, live organisms, recombinant organisms, enzymes, amplification mastermixes, extraction reagents, chaotropic salts, organic solvents, or preservatives not specifically described in this SDS.

1.2. Supplier

Aldatu Biosciences
313 Pleasant Street,
1st Floor West
Watertown, MA 02472
(+1) 978-709-1812 or (+1) 978-705-1036

1.3. Manufacturer

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1.4. Contact

support@aldatubio.com

1.5. Emergency telephone number

(+1) 978-709-1812 or (+1) 978-705-1036

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2. HAZARD(S) IDENTIFICATION

2.1. Classification of substance or mixture

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

2.2. Label elements

- **GHS label elements:** Not applicable.
- **Hazard pictograms:** Not applicable.
- **Signal word:** Not applicable.
- **Hazard statements:** Not applicable.

2.3. Classification system

THIS PRODUCT IS CONSIDERED NON-HAZARDOUS, per OSHA 29CFR1910.1200, Commonwealth of Australia [NOHSC: 1005, 1008(1999)], and the latest amendments to the European Union Directives (EC) No 1907/2006 and (EC) No 2020/878. This SDS is provided for informational purposes and to support safe handling practices. This product does not contain more than 1% of a component classified as hazardous and does not contain more than 0.1% of a component classified as carcinogenic. This product is non-hazardous according to Regulation (EC) No 1272/2008. Despite the classification of certain products/components as non-hazardous, we strongly recommend using prudent laboratory practices: avoiding unnecessary contact and use of personal protective equipment, which may include gloves, eye protection, and lab coats, during the use of any laboratory reagent. Aldatu Biosciences shall not be held liable for any damages resulting from handling or from contact with the above product.

2.4. OSHA Regulatory Status

This Product is Not Hazardous under the OSHA Hazard Communication Standard.

2.5. Other hazards

This product is not classified as PBT or vPvB according to current EU criteria.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization: Mixture

Description: No hazardous ingredients present at concentrations requiring disclosure under OSHA 29 CFR 1910.1200.

4. FIRST-AID MEASURES

4.1. Description of first aid measures

General information Do not leave the affected person unattended. When in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.

Skin contact Wash skin with plenty of soap and water.

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Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if any discomfort continues.

Ingestion Keep respiratory tract clear. Do not give milk or alcoholic beverages. Rinse mouth thoroughly with water. If you feel unwell or you are concerned, seek medical advice.

Inhalation Move affected person to fresh air. If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.

Notes for physician The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

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

General information None.

Skin contact No specific symptoms known.

Eye contact No specific symptoms known.

Ingestion No specific symptoms known.

Inhalation No specific symptoms known.

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

None.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Water spray. Carbon dioxide (CO₂). Foam. Dry chemical.

5.2. Special hazards arising from the substance or mixture

None known.

5.3. Advice for firefighters

Standard procedure for chemical fires.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Always wear recommended Personal Protective Equipment. See Section 8 for more information.

6.2. Environmental precautions

Do not let product enter drains. Do not allow to enter sewers / surface or ground water.

6.3. Methods and material for containment and cleaning up

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Wear protective clothing as described in Section 8. Clear up spills immediately using insert absorbent material and dispose of waste safely.

6.4. Reference to other sections

- See Section 7 for information on safe handling.
- See Section 11 for additional information on health hazards.
- See Section 12 for additional information on ecological hazards.
- See Section 13 for disposal information.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Use personal protective equipment as described in Section 8. Follow general industrial hygiene practice. Smoking, eating and drinking should be prohibited in the application area.

7.2. Information about protection against explosions and fires

No special measures required.

7.3. Conditions for safe storage, including any incompatibilities

No specific recommendations.

7.4. Specific end use(s)

No further relevant information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

- | | |
|-----------------------------|---|
| Exposure limits | Contains no substances with occupational exposure limit values. |
| Engineering measures | Ensure adequate ventilation, especially in confined areas. General industrial hygiene practice. |

8.2. Exposure controls

8.2.1. Personal protective equipment

- | | |
|---|---|
| General protective and hygienic measures | The usual precautionary measures for handling chemicals should be followed and in accordance with good industrial hygiene and safety practices. |
| Respiratory protection | In instances of insufficient ventilation, wear respirators and components tested and approved under appropriate government standards. |
| Eye protection | Not required. |
| Hand protection | Wear suitable gloves. Glove material: Compatible chemical-resistant gloves. |

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Skin and body protection

Wear suitable protective clothing to prevent repeated or prolonged skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Color	Colorless.
Odor	No data available.
Odor threshold	No data available.
pH	No data available.
Melting point / melting range	No data available.
Boiling point / boiling range	No data available.
Flash point	No data available.
Evaporation rate	No data available.
Flammability (solid, gas)	Not relevant (fluid).
Explosive properties	Not considered to be explosive.
Explosive limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	No data available.
Solubility	Fully soluble in water.
Partition coefficient: n-octanol/water	No data available.
Autoignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.

10. STABILITY AND REACTIVITY

Reactivity	No further relevant information available.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No dangerous reactions known.
Conditions to avoid	No further relevant information available.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No dangerous decomposition products known.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

There is no evidence available indicating acute toxicity / based on available data the classification criteria are not met. When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to Aldatu Biosciences.

11.2. Principal Routes of Exposure

Acute toxicity	Data are conclusive but insufficient for classification.
Skin corrosion / irritation	Data are conclusive but insufficient for classification.
Serious eye damage / irritation	Data are conclusive but insufficient for classification.
Respiratory or skin sensitization	Data are conclusive but insufficient for classification.
Specific target organ toxicity (STOT single exposure)	Data are conclusive but insufficient for classification.
Repeated exposure	Data are conclusive but insufficient for classification.
Carcinogenicity	Data are conclusive but insufficient for classification.
Germ cell mutagenicity	Data are conclusive but insufficient for classification.
Reproductive toxicity	Data are conclusive but insufficient for classification.
Aspiration hazard	Data are conclusive but insufficient for classification.

12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity

Contains no substances known to be hazardous to the environment. However, large or frequent spills may have hazardous effects on the environment.

Mobility in soil	No information available.
Persistence and degradability	No information available.
Bioaccumulative potential	No information available.
Results of PBT and vPvB assessment	PBT: Not applicable. vPvB: Not applicable.
General notes	No information available.
Other adverse effects	No further relevant information available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed in according to

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approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

14. TRANSPORT INFORMATION

14.1. IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations.

UN number	Not hazardous for transportation.
UN proper shipping name	Not applicable.
Transport hazard class(es)	Not applicable.
Packing group	Not applicable.

14.2. Environmental hazards

Not hazardous.

14.3. Marine pollutant

No.

14.4. Special precautions for user

Not applicable.

14.5. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

15. REGULATORY INFORMATION

15.1. US Federal regulations

Superfund Amendments and Reauthorization Act (SARA)

None of the ingredients are listed.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs.

15.2. US State regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

15.3. WHMIS Hazard Class

Non-controlled.

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) / WHMIS 2015 and the SDS contains all the required information.

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GHS label elements: Not applicable

Signal word: Not applicable

Hazard regulations: Not applicable

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

16.1. Department issuing SDS

Aldatu Biosciences
313 Pleasant Street,
1st Floor West
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(+1) 978-709-1812 or (+1) 978-705-1036

16.2. Document information

Date of Preparation / Last Revision: 04 Jun 2026
Revision Number: 0

16.3. Abbreviations and acronyms:

- **ADR:** Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).
- **CFR:** Code of Federal Regulations (US).
- **CPR:** Controlled Products Regulations (Canada).
- **DOT-US:** Department of Transportation (US).
- **GHS:** Globally Harmonized System.
- **HAP:** Hazardous Air Pollutant.
- **IATA:** International Air Transport Association.
- **IBC:** International Building Code.
- **IMDG:** International Maritime Code for Dangerous Goods.
- **MARPOL:** International Convention for the Prevention of Pollution from Ships.
- **MSDS:** Material Safety Data Sheet.
- **OSHA:** Occupational Safety and Health Administration of the US Department of Labor.
- **PBT:** Persistent, Bioaccumulative and Toxic.

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- **SARA:** Superfund Amendments and Reauthorization Act (US).
- **SDS:** Safety Data Sheet.
- **UN:** United Nations.
- **US:** United States.
- **vPvB:** very Persistent and very Bioaccumulative.
- **WHMIS:** Workplace Hazardous Materials Information System.