

Material Safety Data Sheet

Version No.: 1.0(Rev. date : 2025-12-02)

AccuTool™ sgRNA (aRGEN)

1. Product and company identification

- A. Product Name: AccuTool™ sgRNA (aRGEN)
- B. Recommended Use: For research and development use only.
Not for pharmaceutical, household, or any other uses.
- C. Supply Information
- ☐ Company: BIONEER
 - ☐ Address: BIONEER Global Center 71, Techno 2-ro, Yuseong-gu, Daejeon, 34013, Republic of Korea
 - ☐ Emergency telephone number: +82-1588-9788
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2. Hazards identification

- A. Classification of the substance of mixture
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. This substance is not classified as dangerous according to Directive 67/548/EEC.
- B. Label elements
- ☐ Hazard pictograms: N/A
 - ☐ Signal word: N/A
 - ☐ Hazard statements: N/A
 - ☐ Precautionary statements: N/A
- C. Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.
Hazards – Other hazards which do not result in classification – Hazard Risk
Not applicable
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3. Composition/information on ingredients

Component	Synonyms	CAS. No.	Concentration(%)
RNA(Oligoribonucleic Acid)	No components need to be disclosed according to the applicable regulations		

4. First aid measures

A. Description of first aid measures

a. In case of eye contact

Flush eyes with water as a precaution.

b. In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

c. If inhaled

Remove person to fresh air and keep comfortable for breathing.

d. If swallowed

Call a poison center or a doctor if you feel unwell.

e. Other medical advice or treatment

Treat symptomatically.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No information available.

5. Fire-fighting measures

A. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Water spray, dry powder, foam, carbon dioxide.

Unsuitable extinguishing media: No data available

B. Special hazards arising from the substance or mixture

No data available

C. Special protective equipment and precautions for fire-fighters

Protection during firefighting:

Do not attempt to take action without suitable protective equipment.

Self-contained breathing apparatus.

Complete protective clothing.

6. Accidental release measures

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- A. Personal precautions, protective equipment and emergency procedures
Avoid dust formation. Avoid breathing vapours, mist or gas. For personal protection see section 8
- B. Environmental precautions and protective procedures
No special environmental precautions required.
- C. Methods and material for containment and cleaning up
Sweep up and shovel. Keep in suitable, closed containers for disposal.
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7. Handling and storage

- A. Precautions for safe handling
- ☐ Precautions for safe handling
Ensure good ventilation of the work station.
Wear personal protective equipment.
 - ☐ Hygiene measures
Do not eat, drink or smoke when using this product.
Always wash hands after handling the product.
- B. Conditions for safe storage
- ☐ Storage conditions
Store in a well-ventilated place.
Refrigerated storage is recommended
Do not use frost-free (auto-defrost) refrigerators for storage.
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8. Exposure controls / personal protection

- A. Occupational Exposure Limits
No data available
- B. Appropriate engineering controls
Appropriate engineering controls: Ensure good ventilation of the work station.
Environmental exposure controls: Avoid release to the environment.
- C. Personal protection equipment
Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment
Eye protection: Safety glasses
Hand protection: Protective gloves
Skin and body protection: Wear suitable protective clothing
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9. Physical and chemical properties

- A. Appearance : White powder
- B. Odor : No data available.
- C. Odor Threshold : No data available.
- D. pH : : No data available.
- E. Melting point : No data available.
- F. Initial boiling point : No data available.
- G. Flash point : No data available.
- H. Evaporation rate : No data available.
- I. Flammability : No data available.
- G. Lower explosion limit/Upper explosion limit : No data available.
- K. Vapor pressure : No data available.
- L. Water solubility : No data available.
- M. Relative vapor density : No data available.
- N. Density : No data available.
- O. Partition coefficient: n-octanol/water : No data available.
- P. Autoignition temperature : No data available.
- Q. Decomposition temperature : No data available.
- R. Viscosity : No data available.
- S. Molecular weight : No data available.

10. Stability and Reactivity

- A. Chemical stability and Possibility of hazardous reactions
 - The product is non-reactive under normal conditions of use, storage and transport.
 - Stable under normal conditions.
 - No dangerous reactions known under normal conditions of use.
 - B. Conditions to avoid: No information available
 - C. Incompatible materials : No data available.
 - D. Hazardous decomposition products: No information available
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11. Toxicological information

A. Information on exposure routes

No data available

B. Health hazards

– mixture

Acute toxicity (oral): Not classified

Acute toxicity (dermal): Not classified

Acute toxicity (inhalation): Not classified

C. Further information : No data available

12. Ecological information

A. Ecotoxicity :Not classified; hazardous constituents are present below the concentration limits.

B. Persistence and degradability :No data available

C. Bioaccumulative potential :No data available

D. Mobility in soil :No data available

E. Other adverse effects

Ozone: No data available

Other adverse effects: No additional information available

13. Disposal considerations

A. Disposal method

Dispose of contents/container in accordance with licensed collector's sorting instructions.

B. Disposal precaution

Dispose contents and vessel in accordance with regulation by the waste disposal law.

14. Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. Regulatory information

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. Other information

- A. List of references : Ministry of environment of KOREA, MSDS(Sima-Aldrich, Bioneer)
- B. Date of issue/revision
 - First issue date: 2021-07-09
 - Last revision date: 2025-12-02
- C. Version: 1

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