

SAFETY DATA SHEET

1. Chemical product and company identification

Product Name

sgRNA, Modified

Identified Uses: For Investigational Use Only

Company identification:Synthego Corporation
3696 Haven Ave, Suite A
Redwood City, CA 94063 USA

Contact numbers:

Tel: +1-888-611-6883

Emergency Tel: +1-650-549-1154 (English)

Email: ehs@synthego.com

2. Hazards identification

2.1 Classification of the substance or mixture:

Not a hazardous substance or mixture

2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture

This product is considered non-hazardous per OSHA 29CFR1910.1200 and the latest amendments to the European Union directives 67/548/EC and 1999/45/EC.

2.3 **GHS Hazard Statements**

H303: May be harmful if swallowed.

H313: May be harmful in contact with skin.

H320: Causes eye irritation.

H333: May be harmful if inhaled.

2.4 **GHS Precautionary Statements**

P103: Read label before use.

P232: Protect from moisture.

P233: Keep container tightly closed.

P280: Wear protective gloves / protective clothing / eye protection / face protection.

2.5 **GHS Response Statements**

P301 + 330: IF SWALLOWED: Rinse mouth with water.

P302 + 350: IF ON SKIN: Gently wash with soap and water.

P304 + 340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + 351 + 338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so - continue rinsing.

P306 + 360: IF ON CLOTHING: Rinse contaminated clothing and skin immediately with plenty of water before removing clothes.

P314: Get medical advice / attention if you feel unwell.

P362: Take off contaminated clothing and wash before use.

2.6 **GHS Storage and Disposal Phrases**

P401 Store in a cool, dry place

P501: Dispose of contents / container in a safe way in accordance with all federal, state and local regulations.

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Emergency Overview

No known OSHA hazards. May cause eye, skin, and respiratory tract irritation.

Route(s) of Entry:

Inhalation: Yes Skin: Yes Eyes: Yes Ingestion: Yes

Potential Health Effects (Acute and Chronic)

No data available.

Recommended Exposure Limits

No data available.

LD 50 / LC 50

No data available.

Signs and Symptoms of Exposure

No data available.

Medical Conditions Generally Aggravated By Exposure

No data available.

Pictogram: Not applicable

Signal Word: Not applicable

3. Composition/information on ingredients

Product Name	CAS #	Concentration	M.W.	Formula
sg RNA, Modified	N/A	100%	N/A	N/A

Synonyms: Modified Synthetic RNA, modified oligo

4. First-aid measures

In case of accidental contact with the reagent, follow procedures below (applies to first aider also):

Inhalation Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. If inhaled remove to fresh air. If not breathing give artificial respiration. Consult a physician if necessary.

Skin Flush skin with soap and plenty of water. Immediate medical attention is not required.

Eyes Flush eyes with plenty of water for several minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do.

Ingestion Not expected to present a significant ingestion hazard under anticipated conditions of normal use. Rinse mouth with water. If you feel unwell, seek medical advice.

Notes to Physician Treat symptomatically. There is no specific antidote.

Most important symptoms and effects, both acute and delayed:

Not applicable

Indication of any immediate medical attention and special treatment needed:

None.

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5. Fire-fighting measures

- 5.1 **Fire Extinguishing media:** Dry chemical, foam, carbon dioxide or water. Care should be taken as to not aerosolize the powder, where it could become an inhalation risk.
- 5.2 **Special hazards arising from the substance or mixture:** None known to exist.
- 5.3 **Advice for fire fighters:** Standard procedure for chemical fires.
- 5.4 **Further information:**
Explosive limits: LEL: No data; UEL: No data

6. Accidental release measures

- 6.1 **Personal precautions, protective equipment and emergency procedures:**
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure
- 6.2 **Environmental precautions:**
No special environmental precautions required.
- 6.3 **Methods and materials for containment and cleanup:**
Contain spill with sand or absorbent material and place material in a sealed bag or container for disposal in a manner consistent with national and local regulations. Wash spill area after pickup is complete. Wash contaminated clothing before reuse.
- 6.4 **Reference to other sections:**
For disposal see section 13

7. Handling and storage

- 7.1 **Precautions for safe handling:**
Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Use established Good Laboratory Working Practices.
- 7.2 **Conditions for safe storage, including incompatibilities:**
Store in a cool, dry place, away from sources of sunlight and heat. The reagents should be stored at -20°C to +4°C, desiccated, where they will retain their potency at least until the expiration date as shown on the container labels. Follow storage conditions as described in instructions for use. Keep in properly labelled containers.
- 7.3 **Specific end use(s):**
For Research use only.

8. Exposure controls and personal protection

- 8.1 **Control parameters**
Components with workplace control parameters
Contains no substances with occupational exposure limit values.
- 8.2 **Exposure Controls**
Appropriate engineering controls
General industrial hygiene practice

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Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin Protection

Handle with gloves. Gloves must be inspected before use. Use proper glove removal technique to ensure that glove's outer surface is not touched and prevent skin contact with this product. Dispose of contaminated glove(s) after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection

Choose body protection in relation to the type, concentration, and amount of dangerous substances and to the specific work-place location.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dust are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards, such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

9. Physical and chemical properties**9.1 Information on the basic physical and chemical properties:**

Appearance: Translucent or opaque flake, film or powder like substance

Odor: No data available

Odor threshold: No data available

pH: No data available

Melting point/freezing point: No data available

Initial boiling point and boiling range: No data available

Flash point: No data available

Evaporating rate: No data available

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits: No data available

Vapor pressure: No data available

Vapor density: No data available

Relative density: No data available

Water solubility: No data available

Partition coefficient: n-octanol/water: No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity: No data available

Explosive properties: No data available

Oxidizing properties: No data available

9.2 Other safety information:

No data available

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10. Stability and reactivity

Reactivity	None known
Chemical stability	Stable within the indicated expiration dating
Possibility of hazardous reactions	None reported
Conditions to avoid	No information available
Stability	Stable under recommended storage conditions within indicated expiration date
Incompatibilities	No dangerous reaction known under conditions of normal use
Hazardous decomposition	No data available.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

No data available.

Inhalation: no data available

Dermal: no data available

Skin corrosion/irritation:

No data available

Serious eye damage / eye irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

No data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by OSHA.

Reproductive toxicity:

No data available.

Specific target organ toxicity – single exposure:

No data available.

Specific target organ toxicity – repeated exposure:

No data available.

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Aspiration hazard

No data available.

Additional information

RTECS: Not available

12. Ecological information**12.1 Toxicity:**

No data available.

12.2 Persistence and degradability:

No data available.

12.3 Bioaccumulative potential:

No data available.

12.4 Mobility in soil:

No data available.

12.5 Results and PBT (persistent, bioaccumulative, and toxic) and vPvB (very persistent and very bioaccumulative) assessment:

PBT/vPvB assessment not available as chemical safety assessment not required / not conducted

12.6 Other adverse effects:

No data available.

13. Disposal considerations**13.1 Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. Transport information

The International Air Transport Association/International Civil Aviation Organization does not currently regulate this type of product as a hazardous material or dangerous goods.

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. Regulatory information**SARA 302 Components**

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

SARA 313 Components

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SARA 313: 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.

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.

WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

16. Other information

sgRNA chemicals are for research purposes only and are not intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct; but does not claim to be all-inclusive and should only be used as a guide. Neither the above-named supplier, nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we cannot guarantee that those are the only hazards that exist. Our SDS sheets are only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long term storage periods as the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS sheets for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, facial mask, fume hood). For proper handling and disposal, always comply with federal, state, and local regulations.