Conforms to Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals

SAFETY DATA SHEET

Agilent Technologies

SureGuide gRNA Control Kit - 20 Reactions, Part Number 5190-7718

Section 1. Identification

Product identifier : SureGuide gRNA Control Kit - 20 Reactions, Part Number 5190-7718

Part no. (chemical kit) : 5190-7718

Part no. : Control DNA Target 5190-7536
Control gRNA 5190-7539

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Analytical reagent.
Control DNA Target 2 x 0.02 ml (20 µl 50 ng/ µl)
Control gRNA 0.01 ml (10 µl 1 µM)

Supplier/Manufacturer : Agilent Technologies Australia Pty Ltd
679 Springvale Road
Mulgrave
Victoria 3170, Australia
1800 802 402

Emergency telephone number (with hours of operation) : CHEMTREC®: +(61)-290372994

Section 2. Hazard(s) identification

Classification of the substance or mixture

Not classified.

GHS label elements

Signal word : Control DNA Target No signal word.
Control gRNA No signal word.

Hazard statements : Control DNA Target No known significant effects or critical hazards.
Control gRNA No known significant effects or critical hazards.

Precautionary statements

Prevention : Control DNA Target Not applicable.
Control gRNA Not applicable.

Response : Control DNA Target Not applicable.
Control gRNA Not applicable.

Storage : Control DNA Target Not applicable.
Control gRNA Not applicable.

Disposal : Control DNA Target Not applicable.
Control gRNA Not applicable.

Supplemental label elements

Additional warning phrases : Control DNA Target Not applicable.
Control gRNA Not applicable.

Other hazards which do not result in classification : Control DNA Target None known.
Control gRNA None known.

Section 3. Composition and ingredient information

Substance/mixture	:	Control DNA Target	Mixture
		Control gRNA	Mixture

CAS number/other identifiers

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	:	Control DNA Target	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
		Control gRNA	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	:	Control DNA Target	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		Control gRNA	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	:	Control DNA Target	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		Control gRNA	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	:	Control DNA Target	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
		Control gRNA	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	:	Control DNA Target	No known significant effects or critical hazards.
		Control gRNA	No known significant effects or critical hazards.
Inhalation	:	Control DNA Target	No known significant effects or critical hazards.
		Control gRNA	No known significant effects or critical hazards.
Skin contact	:	Control DNA Target	No known significant effects or critical hazards.
		Control gRNA	No known significant effects or critical hazards.
Ingestion	:	Control DNA Target	No known significant effects or critical hazards.
		Control gRNA	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	:	Control DNA Target	No specific data.
		Control gRNA	No specific data.
Inhalation	:	Control DNA Target	No specific data.
		Control gRNA	No specific data.

Section 4. First aid measures

Skin contact	:	Control DNA Target	No specific data.
		Control gRNA	No specific data.
Ingestion	:	Control DNA Target	No specific data.
		Control gRNA	No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	:	Control DNA Target	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Control gRNA	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	:	Control DNA Target	No specific treatment.
		Control gRNA	No specific treatment.
Protection of first-aiders	:	Control DNA Target	No action shall be taken involving any personal risk or without suitable training.
		Control gRNA	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media	:	Control DNA Target	Use an extinguishing agent suitable for the surrounding fire.
		Control gRNA	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	:	Control DNA Target	None known.
		Control gRNA	None known.
Specific hazards arising from the chemical	:	Control DNA Target	In a fire or if heated, a pressure increase will occur and the container may burst.
		Control gRNA	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	:	Control DNA Target	No specific data.
		Control gRNA	No specific data.
Special protective actions for fire-fighters	:	Control DNA Target	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
		Control gRNA	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	:	Control DNA Target	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
		Control gRNA	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	Control DNA Target	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
		Control gRNA	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
For emergency responders	:	Control DNA Target	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
		Control gRNA	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions	:	Control DNA Target	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
		Control gRNA	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Methods for cleaning up	:	Control DNA Target	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
		Control gRNA	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	:	Control DNA Target	Put on appropriate personal protective equipment (see Section 8).
		Control gRNA	Put on appropriate personal protective equipment (see Section 8).

Section 7. Handling and storage

Advice on general occupational hygiene :

Control DNA Target

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Control gRNA

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities :

Control DNA Target

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Control gRNA

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

None.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Section 8. Exposure controls and personal protection

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	:	Control DNA Target	Liquid.
		Control gRNA	Liquid.
Colour	:	Control DNA Target	Not available.
		Control gRNA	Not available.
Odour	:	Control DNA Target	Not available.
		Control gRNA	Not available.
Odour threshold	:	Control DNA Target	Not available.
		Control gRNA	Not available.
pH	:	Control DNA Target	8
		Control gRNA	7
Melting point/freezing point	:	Control DNA Target	0°C (32°F)
		Control gRNA	0°C (32°F)
Boiling point, initial boiling point, and boiling range	:	Control DNA Target	100°C (212°F)
		Control gRNA	100°C (212°F)
Flash point	:	Control DNA Target	Not available.
		Control gRNA	Not available.
Evaporation rate	:	Control DNA Target	Not available.
		Control gRNA	Not available.
Flammability	:	Control DNA Target	Not applicable.
		Control gRNA	Not applicable.
Lower and upper explosion limit/flammability limit	:	Control DNA Target	Not available.
		Control gRNA	Not available.
Vapour pressure	:		

Section 9. Physical and chemical properties and safety characteristics

Ingredient name	Vapour Pressure at 20˚C			Vapour pressure at 50˚C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Control DNA Target						
water	17.5	2.3	-	92.258	12.3	-
Control gRNA						
water	17.5	2.3	-	92.258	12.3	-

Relative vapour density : Control DNA Target — Not available.
Control gRNA — Not available.

Relative density : Control DNA Target — Not available.
Control gRNA — Not available.

Solubility(ies) :

Media	Result
Control DNA Target	
water	Soluble
Control gRNA	
water	Soluble

Partition coefficient: n-octanol/water : Control DNA Target — Not applicable.
Control gRNA — Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Control DNA Target — Not available.
Control gRNA — Not available.

Viscosity : Control DNA Target — Not available.
Control gRNA — Not available.

Particle characteristics

Median particle size : Control DNA Target — Not applicable.
Control gRNA — Not applicable.

Section 10. Stability and reactivity

Reactivity : Control DNA Target — No specific test data related to reactivity available for this product or its ingredients.
Control gRNA — No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : Control DNA Target — The product is stable.
Control gRNA — The product is stable.

Possibility of hazardous reactions : Control DNA Target — Under normal conditions of storage and use, hazardous reactions will not occur.
Control gRNA — Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Control DNA Target — No specific data.
Control gRNA — No specific data.

Incompatible materials : Control DNA Target — May react or be incompatible with oxidising materials.
Control gRNA — May react or be incompatible with oxidising materials.

Section 10. Stability and reactivity

Hazardous decomposition products	:	Control DNA Target	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
		Control gRNA	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitisation

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure	:	Control DNA Target	Not available.
		Control gRNA	Not available.

Potential acute health effects

Eye contact	:	Control DNA Target	No known significant effects or critical hazards.
		Control gRNA	No known significant effects or critical hazards.
Inhalation	:	Control DNA Target	No known significant effects or critical hazards.
		Control gRNA	No known significant effects or critical hazards.
Skin contact	:	Control DNA Target	No known significant effects or critical hazards.
		Control gRNA	No known significant effects or critical hazards.
Ingestion	:	Control DNA Target	No known significant effects or critical hazards.
		Control gRNA	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	:	Control DNA Target	No specific data.
		Control gRNA	No specific data.
Inhalation	:	Control DNA Target	No specific data.
		Control gRNA	No specific data.
Skin contact	:	Control DNA Target	No specific data.
		Control gRNA	No specific data.

Section 11. Toxicological information

Ingestion : Control DNA Target — No specific data.
Control gRNA — No specific data.

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General :	Control DNA Target	No known significant effects or critical hazards.
	Control gRNA	No known significant effects or critical hazards.
Carcinogenicity :	Control DNA Target	No known significant effects or critical hazards.
	Control gRNA	No known significant effects or critical hazards.
Mutagenicity :	Control DNA Target	No known significant effects or critical hazards.
	Control gRNA	No known significant effects or critical hazards.
Reproductive toxicity :	Control DNA Target	No known significant effects or critical hazards.
	Control gRNA	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

N/A

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

ADG / IMDG / IATA : Not regulated as Dangerous Goods according to the ADG Code .

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : Not determined.

New Zealand : Not determined.

United States : All components are active or exempted.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 30/06/2023

Date of previous issue : 16/06/2020

Version : 5

Section 16. Any other relevant information

Key to abbreviations : ADG = Australian Dangerous Goods
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SUSMP = Standard Uniform Schedule of Medicine and Poisons
UN = United Nations

Procedure used to derive the classification

Classification
Not classified.

Indicates information that has changed from previously issued version.

Notice to reader

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