

SAFETY DATA SHEET



RNA Spike In Kit - Single Color

Section 1. Identification

Product identifier : RNA Spike In Kit - Single Color
Part no. (chemical kit) : 5188-5282
Part no. : One Color Spike-Mix 5972-3563
 Dilution Buffer 5972-3562

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

Identified uses : Analytical reagent.
 For research use only.
 One Color Spike-Mix 0.01 ml
 Dilution Buffer 1.2 ml

Uses advised against : Not for use in diagnostic procedures.

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 : One Color Spike-Mix No signal word.
 Dilution Buffer No signal word.

Hazard statements : One Color Spike-Mix No known significant effects or critical hazards.
 Dilution Buffer No known significant effects or critical hazards.

Precautionary statements

Prevention : One Color Spike-Mix Not applicable.
 Dilution Buffer Not applicable.

Response : One Color Spike-Mix Not applicable.
 Dilution Buffer Not applicable.

Storage : One Color Spike-Mix Not applicable.
 Dilution Buffer Not applicable.

Disposal : One Color Spike-Mix Not applicable.
 Dilution Buffer Not applicable.

Supplemental label elements

Additional warning phrases : One Color Spike-Mix Not applicable.
 Dilution Buffer Not applicable.

Other hazards which do not result in classification : One Color Spike-Mix None known.
 Dilution Buffer None known.

Section 3. Composition and ingredient information

Substance/mixture : One Color Spike-Mix Mixture
Dilution Buffer 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	: One Color Spike-Mix	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.
	Dilution Buffer	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	: One Color Spike-Mix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Dilution Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: One Color Spike-Mix	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Dilution Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: One Color Spike-Mix	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.
	Dilution Buffer	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	: One Color Spike-Mix	No known significant effects or critical hazards.
	Dilution Buffer	No known significant effects or critical hazards.
Inhalation	: One Color Spike-Mix	No known significant effects or critical hazards.
	Dilution Buffer	No known significant effects or critical hazards.
Skin contact	: One Color Spike-Mix	No known significant effects or critical hazards.
	Dilution Buffer	No known significant effects or critical hazards.
Ingestion	: One Color Spike-Mix	No known significant effects or critical hazards.
	Dilution Buffer	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: One Color Spike-Mix	No specific data.
	Dilution Buffer	No specific data.
Inhalation	: One Color Spike-Mix	No specific data.
	Dilution Buffer	No specific data.

Section 4. First aid measures

Skin contact	: One Color Spike-Mix Dilution Buffer	No specific data. No specific data.
Ingestion	: One Color Spike-Mix Dilution Buffer	No specific data. No specific data.

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

Notes to physician	: One Color Spike-Mix Dilution Buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: One Color Spike-Mix Dilution Buffer	No specific treatment. No specific treatment.
Protection of first-aiders	: One Color Spike-Mix Dilution Buffer	No action shall be taken involving any personal risk or without suitable training. 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	: One Color Spike-Mix Dilution Buffer	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: One Color Spike-Mix Dilution Buffer	None known. None known.
Specific hazards arising from the chemical	: One Color Spike-Mix Dilution Buffer	In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: One Color Spike-Mix Dilution Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides No specific data.
Special protective actions for fire-fighters	: One Color Spike-Mix Dilution Buffer	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. 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	: One Color Spike-Mix Dilution Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. 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	: One Color Spike-Mix	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.
	Dilution Buffer	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	: One Color Spike-Mix	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".
	Dilution Buffer	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	: One Color Spike-Mix	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).
	Dilution Buffer	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	: One Color Spike-Mix	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.
	Dilution Buffer	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	: One Color Spike-Mix	Put on appropriate personal protective equipment (see Section 8).
	Dilution Buffer	Put on appropriate personal protective equipment (see Section 8).

Section 7. Handling and storage

Advice on general occupational hygiene

: One Color Spike-Mix

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.

Dilution Buffer

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 : One Color Spike-Mix

Dilution Buffer

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.

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	: One Color Spike-Mix Dilution Buffer	Liquid. Liquid.
Colour	: One Color Spike-Mix Dilution Buffer	Not available. Not available.
Odour	: One Color Spike-Mix Dilution Buffer	Not available. Not available.
Odour threshold	: One Color Spike-Mix Dilution Buffer	Not available. Not available.
pH	: One Color Spike-Mix Dilution Buffer	6.4 7
Melting point/freezing point	: One Color Spike-Mix Dilution Buffer	Not available. 0°C (32°F)
Boiling point, initial boiling point, and boiling range	: One Color Spike-Mix Dilution Buffer	Not available. 100°C (212°F)
Flash point	: One Color Spike-Mix Dilution Buffer	Not available. Not available.
Evaporation rate	: One Color Spike-Mix Dilution Buffer	Not available. Not available.
Flammability	: One Color Spike-Mix Dilution Buffer	Not applicable. Not applicable.
Lower and upper explosion limit/flammability limit	: One Color Spike-Mix Dilution Buffer	Not available. 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
One Color Spike-Mix						
water	17.5	2.3	-	92.258	12.3	-
Dilution Buffer						
water	17.5	2.3	-	92.258	12.3	-

Relative vapour density : One Color Spike-Mix Not available.
Dilution Buffer Not available.

Relative density : One Color Spike-Mix Not available.
Dilution Buffer Not available.

Media	Result
One Color Spike-Mix	
water	Soluble
Dilution Buffer	
water	Soluble

Partition coefficient: n-octanol/water : One Color Spike-Mix Not applicable.
Dilution Buffer Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : One Color Spike-Mix Not available.
Dilution Buffer Not available.

Viscosity : One Color Spike-Mix Not available.
Dilution Buffer Not available.

Particle characteristics

Median particle size : One Color Spike-Mix Not applicable.
Dilution Buffer Not applicable.

Section 10. Stability and reactivity

Reactivity : One Color Spike-Mix No specific test data related to reactivity available for this product or its ingredients.
Dilution Buffer No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : One Color Spike-Mix The product is stable.
Dilution Buffer The product is stable.

Possibility of hazardous reactions : One Color Spike-Mix Under normal conditions of storage and use, hazardous reactions will not occur.
Dilution Buffer Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : One Color Spike-Mix No specific data.
Dilution Buffer No specific data.

Incompatible materials : One Color Spike-Mix May react or be incompatible with oxidising materials.
Dilution Buffer May react or be incompatible with oxidising materials.

Section 10. Stability and reactivity

Hazardous decomposition products : One Color Spike-Mix

Dilution Buffer

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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 : One Color Spike-Mix
Dilution Buffer

Not available.

Not available.

Potential acute health effects

Eye contact : One Color Spike-Mix
Dilution Buffer

No known significant effects or critical hazards.

No known significant effects or critical hazards.

Inhalation : One Color Spike-Mix
Dilution Buffer

No known significant effects or critical hazards.

No known significant effects or critical hazards.

Skin contact : One Color Spike-Mix
Dilution Buffer

No known significant effects or critical hazards.

No known significant effects or critical hazards.

Ingestion : One Color Spike-Mix
Dilution Buffer

No known significant effects or critical hazards.

No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : One Color Spike-Mix
Dilution Buffer

No specific data.

No specific data.

Inhalation : One Color Spike-Mix
Dilution Buffer

No specific data.

No specific data.

Skin contact : One Color Spike-Mix
Dilution Buffer

No specific data.

No specific data.

Section 11. Toxicological information

Ingestion : One Color Spike-Mix Dilution Buffer No specific data.
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	: One Color Spike-Mix Dilution Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.
Carcinogenicity	: One Color Spike-Mix Dilution Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: One Color Spike-Mix Dilution Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.
Reproductive toxicity	: One Color Spike-Mix Dilution Buffer	No known significant effects or critical hazards. 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 : All components are listed or exempted.

New Zealand : All components are listed or exempted.

United States : All components are active or exempted.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 20/09/2024

Date of previous issue : 30/08/2021

Version : 8

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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