

# SAFETY DATA SHEET

## RNA Spike In Kit - Single Color

### Section 1. Identification

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

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

<b>Identified uses</b>	: 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, Inc.  
5301 Stevens Creek Blvd  
Santa Clara, CA 95051, USA  
800-227-9770

**Emergency telephone number (with hours of operation)** : CHEMTREC®: 1-800-424-9300

### Section 2. Hazard identification

#### Classification of the substance or mixture

Not classified.

#### GHS label elements

<b>Signal word</b>	: One Color Spike-Mix Dilution Buffer	No signal word. No signal word.
<b>Hazard statements</b>	: One Color Spike-Mix Dilution Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.

#### Precautionary statements

<b>Prevention</b>	: One Color Spike-Mix Dilution Buffer	Not applicable. Not applicable.
<b>Response</b>	: One Color Spike-Mix Dilution Buffer	Not applicable. Not applicable.
<b>Storage</b>	: One Color Spike-Mix Dilution Buffer	Not applicable. Not applicable.
<b>Disposal</b>	: One Color Spike-Mix Dilution Buffer	Not applicable. Not applicable.
<b>Supplemental label elements</b>	: One Color Spike-Mix Dilution Buffer	None known. None known.
<b>Other hazards which do not result in classification</b>	: One Color Spike-Mix Dilution Buffer	None known. None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : One Color Spike-Mix Mixture  
Dilution Buffer Mixture

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.

## Section 4. First-aid measures

### Description of necessary first aid measures

<b>Eye contact</b>	: One Color Spike-Mix 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. 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.
<b>Inhalation</b>	: One Color Spike-Mix Dilution Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
<b>Skin contact</b>	: One Color Spike-Mix Dilution Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
<b>Ingestion</b>	: One Color Spike-Mix 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. 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

<b>Eye contact</b>	: One Color Spike-Mix Dilution Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Inhalation</b>	: One Color Spike-Mix Dilution Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Skin contact</b>	: One Color Spike-Mix Dilution Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	: One Color Spike-Mix Dilution Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: One Color Spike-Mix Dilution Buffer	No specific data. No specific data.
<b>Inhalation</b>	: One Color Spike-Mix Dilution Buffer	No specific data. No specific data.

## Section 4. First-aid measures

<b>Skin contact</b>	: One Color Spike-Mix Dilution Buffer	No specific data. No specific data.
<b>Ingestion</b>	: One Color Spike-Mix Dilution Buffer	No specific data. No specific data.

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

<b>Notes to physician</b>	: 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.
<b>Specific treatments</b>	: One Color Spike-Mix Dilution Buffer	No specific treatment. No specific treatment.
<b>Protection of first-aiders</b>	: 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. Fire-fighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	: One Color Spike-Mix  Dilution Buffer	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: One Color Spike-Mix Dilution Buffer	None known. None known.
<b>Specific hazards arising from the chemical</b>	: 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.
<b>Hazardous thermal decomposition products</b>	: One Color Spike-Mix  Dilution Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides No specific data.
<b>Special protective actions for fire-fighters</b>	: 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.

## Section 5. Fire-fighting measures

<b>Special protective equipment for fire-fighters</b>	: One Color Spike-Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	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.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: 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 spilled 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 spilled material. Put on appropriate personal protective equipment.
<b>For emergency responders</b>	: One Color Spike-Mix	If specialized 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 specialized 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".
<b>Environmental precautions</b>	: One Color Spike-Mix	Avoid dispersal of spilled 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 spilled 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 materials for containment and cleaning up

<b>Methods for cleaning up</b>	: 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

<b>Protective measures</b>	: One Color Spike-Mix Dilution Buffer	Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8).
<b>Advice on general occupational hygiene</b>	: One Color Spike-Mix  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. 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.
<b>Conditions for safe storage, including any incompatibilities</b>	: 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 unlabeled 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/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.

## Section 8. Exposure controls/personal protection

**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

**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

<b>Physical state</b>	: One Color Spike-Mix Dilution Buffer	Liquid. Liquid.
<b>Color</b>	: One Color Spike-Mix Dilution Buffer	Not available. Not available.
<b>Odor</b>	: One Color Spike-Mix Dilution Buffer	Not available. Not available.
<b>Odor threshold</b>	: One Color Spike-Mix Dilution Buffer	Not available. Not available.
<b>pH</b>	: One Color Spike-Mix Dilution Buffer	6.4 7
<b>Melting point/freezing point</b>	: One Color Spike-Mix Dilution Buffer	Not available. 0°C (32°F)
<b>Boiling point, initial boiling point, and boiling range</b>	: One Color Spike-Mix Dilution Buffer	Not available. 100°C (212°F)
<b>Flash point</b>	: One Color Spike-Mix Dilution Buffer	Not available. Not available.
<b>Evaporation rate</b>	: One Color Spike-Mix Dilution Buffer	Not available. Not available.

## Section 9. Physical and chemical properties and safety characteristics

<b>Flammability</b>	: One Color Spike-Mix Dilution Buffer	Not applicable. Not applicable.
<b>Lower and upper explosion limit/flammability limit</b>	: One Color Spike-Mix Dilution Buffer	Not available. Not available.

<b>Vapor pressure</b>	:	<b>Vapor Pressure at 20°C</b>			<b>Vapor pressure at 50°C</b>		
		<b>mm Hg</b>	<b>kPa</b>	<b>Method</b>	<b>mm Hg</b>	<b>kPa</b>	<b>Method</b>
<b>One Color Spike-Mix</b>							
water		17.5	2.3	-	92.258	12.3	-
<b>Dilution Buffer</b>							
water		17.5	2.3	-	92.258	12.3	-

<b>Relative vapor density</b>	: One Color Spike-Mix Dilution Buffer	Not available. Not available.
<b>Relative density</b>	: One Color Spike-Mix Dilution Buffer	Not available. Not available.

<b>Solubility(ies)</b>	:	<b>Media</b>	<b>Result</b>
		<b>One Color Spike-Mix</b>	
		water	Soluble
		<b>Dilution Buffer</b>	
		water	Soluble

<b>Partition coefficient: n-octanol/water</b>	: One Color Spike-Mix Dilution Buffer	Not applicable. Not applicable.
<b>Auto-ignition temperature</b>	: Not available.	
<b>Decomposition temperature</b>	: One Color Spike-Mix Dilution Buffer	Not available. Not available.
<b>Viscosity</b>	: One Color Spike-Mix Dilution Buffer	Not available. Not available.
<b>Particle characteristics</b>		
<b>Median particle size</b>	: One Color Spike-Mix Dilution Buffer	Not applicable. Not applicable.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: One Color Spike-Mix Dilution Buffer	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: One Color Spike-Mix Dilution Buffer	The product is stable. The product is stable.
<b>Possibility of hazardous reactions</b>	: One Color Spike-Mix Dilution Buffer	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to avoid</b>	: One Color Spike-Mix Dilution Buffer	No specific data. No specific data.

## Section 10. Stability and reactivity

<b>Incompatible materials</b>	: One Color Spike-Mix Dilution Buffer	May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials.
<b>Hazardous decomposition products</b>	: 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.

#### Sensitization

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.

<b>Information on the likely routes of exposure</b>	: One Color Spike-Mix Dilution Buffer	Not available. Not available.
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### Potential acute health effects

<b>Eye contact</b>	: One Color Spike-Mix Dilution Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Inhalation</b>	: One Color Spike-Mix Dilution Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Skin contact</b>	: One Color Spike-Mix Dilution Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	: 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

## Section 11. Toxicological information

<b>Eye contact</b>	: One Color Spike-Mix Dilution Buffer	No specific data. No specific data.
<b>Inhalation</b>	: One Color Spike-Mix Dilution Buffer	No specific data. No specific data.
<b>Skin contact</b>	: One Color Spike-Mix Dilution Buffer	No specific data. No specific data.
<b>Ingestion</b>	: One Color Spike-Mix Dilution Buffer	No specific data. No specific data.

### Delayed and immediate effects and also 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<sub>oc</sub>)** : Not available.

## Section 12. Ecological information

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

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

**TDG / IMDG / IATA** : Not regulated.

**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

### Canadian lists

**Canadian NPRI** : None of the components are listed.

**CEPA Toxic substances** : None of the components are listed.

### 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

**Canada** : All components are listed or exempted.

**United States** : All components are active or exempted.

## Section 16. Other information

### History

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

**Date of previous issue** : 08/30/2021

**Version** : 8

### Key to abbreviations

: ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 HPR = Hazardous Products Regulations  
 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  
 UN = United Nations

### Procedure used to derive the classification

<b>Classification</b>	<b>Justification</b>
Not classified.	

✔ Indicates information that has changed from previously issued version.

### Notice to reader

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