

SAFETY DATA SHEET



Agilent RNA 6000 Nano Kit, Part Number 5067-1511

Section 1. Identification

Product identifier : Agilent RNA 6000 Nano Kit, Part Number 5067-1511
Part No. (Chemical Kit) : 5067-1511
Part No. : RNA 6000 Nano Gel Matrix Not available.
 RNA Nano Dye Concentrate Not available.
 RNA 6000 Nano Marker Not available.
 RNA 6000 Nano Ladder Not available.

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

Analytical chemistry.
 Research and Development

RNA 6000 Nano Gel Matrix	2 x 1.2 ml
RNA Nano Dye Concentrate	1 x 0.035 ml
RNA 6000 Nano Marker	2 x 1.2 ml
RNA 6000 Nano Ladder	1 x 0.035 ml

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.

RNA Nano Dye Concentrate Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: > 60%

GHS label elements

Signal word : RNA 6000 Nano Gel Matrix No signal word.
 RNA Nano Dye Concentrate No signal word.
 RNA 6000 Nano Marker No signal word.
 RNA 6000 Nano Ladder No signal word.

Hazard statements : RNA 6000 Nano Gel Matrix No known significant effects or critical hazards.
 RNA Nano Dye Concentrate No known significant effects or critical hazards.
 RNA 6000 Nano Marker No known significant effects or critical hazards.
 RNA 6000 Nano Ladder No known significant effects or critical hazards.

Precautionary statements

Prevention : RNA 6000 Nano Gel Matrix Not applicable.
 RNA Nano Dye Concentrate Not applicable.
 RNA 6000 Nano Marker Not applicable.
 RNA 6000 Nano Ladder Not applicable.

Response : RNA 6000 Nano Gel Matrix Not applicable.
 RNA Nano Dye Concentrate Not applicable.
 RNA 6000 Nano Marker Not applicable.
 RNA 6000 Nano Ladder Not applicable.

Section 2. Hazard(s) identification

Storage	:	RNA 6000 Nano Gel Matrix	Not applicable.
		RNA Nano Dye Concentrate	Not applicable.
		RNA 6000 Nano Marker	Not applicable.
		RNA 6000 Nano Ladder	Not applicable.
Disposal	:	RNA 6000 Nano Gel Matrix	Not applicable.
		RNA Nano Dye Concentrate	Not applicable.
		RNA 6000 Nano Marker	Not applicable.
		RNA 6000 Nano Ladder	Not applicable.
Supplemental label elements	:	RNA 6000 Nano Gel Matrix	Not applicable.
		RNA Nano Dye Concentrate	Not applicable.
		RNA 6000 Nano Marker	Not applicable.
		RNA 6000 Nano Ladder	Not applicable.
Other hazards which do not result in classification	:	RNA 6000 Nano Gel Matrix	None known.
		RNA Nano Dye Concentrate	None known.
		RNA 6000 Nano Marker	None known.
		RNA 6000 Nano Ladder	None known.

Section 3. Composition and ingredient information

Substance/mixture	:	RNA 6000 Nano Gel Matrix	Mixture
		RNA Nano Dye Concentrate	Mixture
		RNA 6000 Nano Marker	Mixture
		RNA 6000 Nano Ladder	Mixture

CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
RNA Nano Dye Concentrate Dimethyl sulfoxide	≥90	67-68-5

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	:	RNA 6000 Nano Gel Matrix	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.
		RNA Nano Dye Concentrate	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.
		RNA 6000 Nano Marker	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.
		RNA 6000 Nano Ladder	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.

Section 4. First aid measures

Inhalation	: RNA 6000 Nano Gel Matrix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	RNA Nano Dye Concentrate	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	RNA 6000 Nano Marker	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	RNA 6000 Nano Ladder	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: RNA 6000 Nano Gel Matrix	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	RNA Nano Dye Concentrate	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	RNA 6000 Nano Marker	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	RNA 6000 Nano Ladder	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: RNA 6000 Nano Gel Matrix	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.
	RNA Nano Dye Concentrate	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.
	RNA 6000 Nano Marker	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.
	RNA 6000 Nano Ladder	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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	: RNA 6000 Nano Gel Matrix	No known significant effects or critical hazards.
	RNA Nano Dye Concentrate	No known significant effects or critical hazards.
	RNA 6000 Nano Marker	No known significant effects or critical hazards.
	RNA 6000 Nano Ladder	No known significant effects or critical hazards.

Section 4. First aid measures

Inhalation	: RNA 6000 Nano Gel Matrix RNA Nano Dye Concentrate RNA 6000 Nano Marker RNA 6000 Nano Ladder	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Skin contact	: RNA 6000 Nano Gel Matrix RNA Nano Dye Concentrate RNA 6000 Nano Marker RNA 6000 Nano Ladder	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Ingestion	: RNA 6000 Nano Gel Matrix RNA Nano Dye Concentrate RNA 6000 Nano Marker RNA 6000 Nano Ladder	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: RNA 6000 Nano Gel Matrix RNA Nano Dye Concentrate RNA 6000 Nano Marker RNA 6000 Nano Ladder	No specific data. No specific data. No specific data. No specific data.
Inhalation	: RNA 6000 Nano Gel Matrix RNA Nano Dye Concentrate RNA 6000 Nano Marker RNA 6000 Nano Ladder	No specific data. No specific data. No specific data. No specific data.
Skin contact	: RNA 6000 Nano Gel Matrix RNA Nano Dye Concentrate RNA 6000 Nano Marker RNA 6000 Nano Ladder	No specific data. No specific data. No specific data. No specific data.
Ingestion	: RNA 6000 Nano Gel Matrix RNA Nano Dye Concentrate RNA 6000 Nano Marker RNA 6000 Nano Ladder	No specific data. No specific data. No specific data. No specific data.

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

Notes to physician	: RNA 6000 Nano Gel Matrix RNA Nano Dye Concentrate RNA 6000 Nano Marker RNA 6000 Nano Ladder	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. 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	: RNA 6000 Nano Gel Matrix RNA Nano Dye Concentrate RNA 6000 Nano Marker RNA 6000 Nano Ladder	No specific treatment. No specific treatment. No specific treatment. No specific treatment.
Protection of first-aiders	: RNA 6000 Nano Gel Matrix RNA Nano Dye Concentrate RNA 6000 Nano Marker RNA 6000 Nano Ladder	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. 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	: RNA 6000 Nano Gel Matrix	Use an extinguishing agent suitable for the surrounding fire.
	RNA Nano Dye Concentrate	Use an extinguishing agent suitable for the surrounding fire.
	RNA 6000 Nano Marker	Use an extinguishing agent suitable for the surrounding fire.
	RNA 6000 Nano Ladder	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: RNA 6000 Nano Gel Matrix	None known.
	RNA Nano Dye Concentrate	None known.
	RNA 6000 Nano Marker	None known.
	RNA 6000 Nano Ladder	None known.

Specific hazards arising from the chemical

: RNA 6000 Nano Gel Matrix	In a fire or if heated, a pressure increase will occur and the container may burst.
RNA Nano Dye Concentrate	In a fire or if heated, a pressure increase will occur and the container may burst.
RNA 6000 Nano Marker	In a fire or if heated, a pressure increase will occur and the container may burst.
RNA 6000 Nano Ladder	In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products

: RNA 6000 Nano Gel Matrix	No specific data.
RNA Nano Dye Concentrate	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides
RNA 6000 Nano Marker	No specific data.
RNA 6000 Nano Ladder	No specific data.

Special protective actions for fire-fighters

: RNA 6000 Nano Gel Matrix	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.
RNA Nano Dye Concentrate	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.
RNA 6000 Nano Marker	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.
RNA 6000 Nano Ladder	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

: RNA 6000 Nano Gel Matrix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
RNA Nano Dye Concentrate	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
RNA 6000 Nano Marker	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
RNA 6000 Nano Ladder	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus

Section 5. Firefighting measures

(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	: RNA 6000 Nano Gel Matrix	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.
	RNA Nano Dye Concentrate	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.
	RNA 6000 Nano Marker	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.
	RNA 6000 Nano Ladder	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	: RNA 6000 Nano Gel Matrix	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".
	RNA Nano Dye Concentrate	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".
	RNA 6000 Nano Marker	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".
	RNA 6000 Nano Ladder	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	: RNA 6000 Nano Gel Matrix	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).
	RNA Nano Dye Concentrate	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).
	RNA 6000 Nano Marker	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).
	RNA 6000 Nano Ladder	Avoid dispersal of spilt material and runoff and

Section 6. Accidental release measures

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	: RNA 6000 Nano Gel Matrix	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.
	RNA Nano Dye Concentrate	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.
	RNA 6000 Nano Marker	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.
	RNA 6000 Nano Ladder	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	: RNA 6000 Nano Gel Matrix	Put on appropriate personal protective equipment (see Section 8).
	RNA Nano Dye Concentrate	Put on appropriate personal protective equipment (see Section 8).
	RNA 6000 Nano Marker	Put on appropriate personal protective equipment (see Section 8).
	RNA 6000 Nano Ladder	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	: RNA 6000 Nano Gel Matrix	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.
	RNA Nano Dye Concentrate	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.
	RNA 6000 Nano Marker	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

Section 7. Handling and storage

<p>RNA 6000 Nano Ladder</p>	<p>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.</p>
<p>Conditions for safe storage, including any incompatibilities : RNA 6000 Nano Gel Matrix</p>	<p>Storage temperature: 4°C (39.2°F). 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.</p>
<p>RNA Nano Dye Concentrate</p>	<p>Storage temperature: 4°C (39.2°F). 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.</p>
<p>RNA 6000 Nano Marker</p>	<p>Storage temperature: 4°C (39.2°F). 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.</p>
<p>RNA 6000 Nano Ladder</p>	<p>Storage temperature: 4°C (39.2°F). 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.</p>

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
RNA Nano Dye Concentrate Dimethyl sulfoxide	DFG MAC-values list (Germany, 7/2015). Absorbed through skin. PEAK: 320 mg/m ³ , 4 times per shift, 15 minutes. TWA: 160 mg/m ³ 8 hours. PEAK: 100 ppm, 4 times per shift, 15 minutes. TWA: 50 ppm 8 hours.

- 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

- 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

Appearance

- Physical state** :

RNA 6000 Nano Gel Matrix	Liquid.
RNA Nano Dye Concentrate	Liquid.
RNA 6000 Nano Marker	Liquid.
RNA 6000 Nano Ladder	Liquid.
- Colour** :

RNA 6000 Nano Gel Matrix	Not available.
RNA Nano Dye Concentrate	Blue.
RNA 6000 Nano Marker	Not available.
RNA 6000 Nano Ladder	Not available.

Section 9. Physical and chemical properties

Odour	: RNA 6000 Nano Gel Matrix	Not available.
	RNA Nano Dye Concentrate	Not available.
	RNA 6000 Nano Marker	Not available.
	RNA 6000 Nano Ladder	Not available.
Odour threshold	: RNA 6000 Nano Gel Matrix	Not available.
	RNA Nano Dye Concentrate	Not available.
	RNA 6000 Nano Marker	Not available.
	RNA 6000 Nano Ladder	Not available.
pH	: RNA 6000 Nano Gel Matrix	Not available.
	RNA Nano Dye Concentrate	Not available.
	RNA 6000 Nano Marker	Not available.
	RNA 6000 Nano Ladder	Not available.
Melting point	: RNA 6000 Nano Gel Matrix	0°C (32°F)
	RNA Nano Dye Concentrate	18.4°C (65.1°F)
	RNA 6000 Nano Marker	0°C (32°F)
	RNA 6000 Nano Ladder	0°C (32°F)
Boiling point	: RNA 6000 Nano Gel Matrix	100°C (212°F)
	RNA Nano Dye Concentrate	189°C (372.2°F)
	RNA 6000 Nano Marker	100°C (212°F)
	RNA 6000 Nano Ladder	100°C (212°F)
Flash point	: RNA 6000 Nano Gel Matrix	Not available.
	RNA Nano Dye Concentrate	Closed cup: 94°C (201.2°F)
	RNA 6000 Nano Marker	Not available.
	RNA 6000 Nano Ladder	Not available.
Evaporation rate	: RNA 6000 Nano Gel Matrix	Not available.
	RNA Nano Dye Concentrate	Not available.
	RNA 6000 Nano Marker	Not available.
	RNA 6000 Nano Ladder	Not available.
Flammability (solid, gas)	: RNA 6000 Nano Gel Matrix	Not applicable.
	RNA Nano Dye Concentrate	Not applicable.
	RNA 6000 Nano Marker	Not applicable.
	RNA 6000 Nano Ladder	Not applicable.
Lower and upper explosive (flammable) limits	: RNA 6000 Nano Gel Matrix	Not available.
	RNA Nano Dye Concentrate	Not available.
	RNA 6000 Nano Marker	Not available.
	RNA 6000 Nano Ladder	Not available.
Vapour pressure	: RNA 6000 Nano Gel Matrix	Not available.
	RNA Nano Dye Concentrate	Not available.
	RNA 6000 Nano Marker	Not available.
	RNA 6000 Nano Ladder	Not available.
Vapour density	: RNA 6000 Nano Gel Matrix	Not available.
	RNA Nano Dye Concentrate	Not available.
	RNA 6000 Nano Marker	Not available.
	RNA 6000 Nano Ladder	Not available.
Relative density	: RNA 6000 Nano Gel Matrix	Not available.
	RNA Nano Dye Concentrate	Not available.
	RNA 6000 Nano Marker	Not available.
	RNA 6000 Nano Ladder	Not available.
Solubility	: RNA 6000 Nano Gel Matrix	Easily soluble in the following materials: cold water and hot water.
	RNA Nano Dye Concentrate	Soluble in the following materials: cold water and hot water.
	RNA 6000 Nano Marker	Easily soluble in the following materials: cold water and hot water.
	RNA 6000 Nano Ladder	Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: RNA 6000 Nano Gel Matrix	Not available.
	RNA Nano Dye Concentrate	Not available.
	RNA 6000 Nano Marker	Not available.
	RNA 6000 Nano Ladder	Not available.

Section 9. Physical and chemical properties

Auto-ignition temperature	: RNA 6000 Nano Gel Matrix	Not available.
	RNA Nano Dye Concentrate	Not available.
	RNA 6000 Nano Marker	Not available.
	RNA 6000 Nano Ladder	Not available.
Decomposition temperature	: RNA 6000 Nano Gel Matrix	Not available.
	RNA Nano Dye Concentrate	Not available.
	RNA 6000 Nano Marker	Not available.
	RNA 6000 Nano Ladder	Not available.
Viscosity	: RNA 6000 Nano Gel Matrix	Not available.
	RNA Nano Dye Concentrate	Not available.
	RNA 6000 Nano Marker	Not available.
	RNA 6000 Nano Ladder	Not available.

Section 10. Stability and reactivity

Reactivity	: RNA 6000 Nano Gel Matrix	No specific test data related to reactivity available for this product or its ingredients.
	RNA Nano Dye Concentrate	No specific test data related to reactivity available for this product or its ingredients.
	RNA 6000 Nano Marker	No specific test data related to reactivity available for this product or its ingredients.
	RNA 6000 Nano Ladder	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: RNA 6000 Nano Gel Matrix	The product is stable.
	RNA Nano Dye Concentrate	The product is stable.
	RNA 6000 Nano Marker	The product is stable.
	RNA 6000 Nano Ladder	The product is stable.
Possibility of hazardous reactions	: RNA 6000 Nano Gel Matrix	Under normal conditions of storage and use, hazardous reactions will not occur.
	RNA Nano Dye Concentrate	Under normal conditions of storage and use, hazardous reactions will not occur.
	RNA 6000 Nano Marker	Under normal conditions of storage and use, hazardous reactions will not occur.
	RNA 6000 Nano Ladder	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: RNA 6000 Nano Gel Matrix	No specific data.
	RNA Nano Dye Concentrate	No specific data.
	RNA 6000 Nano Marker	No specific data.
	RNA 6000 Nano Ladder	No specific data.
Incompatible materials	: RNA 6000 Nano Gel Matrix	May react or be incompatible with oxidising materials.
	RNA Nano Dye Concentrate	May react or be incompatible with oxidising materials.
	RNA 6000 Nano Marker	May react or be incompatible with oxidising materials.
	RNA 6000 Nano Ladder	May react or be incompatible with oxidising materials.
Hazardous decomposition products	: RNA 6000 Nano Gel Matrix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	RNA Nano Dye Concentrate	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	RNA 6000 Nano Marker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	RNA 6000 Nano Ladder	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
RNA Nano Dye Concentrate Dimethyl sulfoxide	LD50 Dermal LD50 Oral	Rat Rat	40000 mg/kg 14500 mg/kg	- -

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
RNA Nano Dye Concentrate Dimethyl sulfoxide	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	100 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	100 milligrams	-

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

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	: RNA 6000 Nano Gel Matrix RNA Nano Dye Concentrate RNA 6000 Nano Marker RNA 6000 Nano Ladder	Not available. Routes of entry anticipated: Oral, Dermal, Inhalation. Not available. Not available.
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Potential acute health effects

Eye contact	: RNA 6000 Nano Gel Matrix RNA Nano Dye Concentrate RNA 6000 Nano Marker RNA 6000 Nano Ladder	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Inhalation	: RNA 6000 Nano Gel Matrix RNA Nano Dye Concentrate RNA 6000 Nano Marker RNA 6000 Nano Ladder	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

Section 11. Toxicological information

Skin contact	: RNA 6000 Nano Gel Matrix	No known significant effects or critical hazards.
	RNA Nano Dye Concentrate	No known significant effects or critical hazards.
	RNA 6000 Nano Marker	No known significant effects or critical hazards.
	RNA 6000 Nano Ladder	No known significant effects or critical hazards.
Ingestion	: RNA 6000 Nano Gel Matrix	No known significant effects or critical hazards.
	RNA Nano Dye Concentrate	No known significant effects or critical hazards.
	RNA 6000 Nano Marker	No known significant effects or critical hazards.
	RNA 6000 Nano Ladder	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: RNA 6000 Nano Gel Matrix	No specific data.
	RNA Nano Dye Concentrate	No specific data.
	RNA 6000 Nano Marker	No specific data.
	RNA 6000 Nano Ladder	No specific data.
Inhalation	: RNA 6000 Nano Gel Matrix	No specific data.
	RNA Nano Dye Concentrate	No specific data.
	RNA 6000 Nano Marker	No specific data.
	RNA 6000 Nano Ladder	No specific data.
Skin contact	: RNA 6000 Nano Gel Matrix	No specific data.
	RNA Nano Dye Concentrate	No specific data.
	RNA 6000 Nano Marker	No specific data.
	RNA 6000 Nano Ladder	No specific data.
Ingestion	: RNA 6000 Nano Gel Matrix	No specific data.
	RNA Nano Dye Concentrate	No specific data.
	RNA 6000 Nano Marker	No specific data.
	RNA 6000 Nano Ladder	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

Not available.

General	: RNA 6000 Nano Gel Matrix	No known significant effects or critical hazards.
	RNA Nano Dye Concentrate	No known significant effects or critical hazards.
	RNA 6000 Nano Marker	No known significant effects or critical hazards.
	RNA 6000 Nano Ladder	No known significant effects or critical hazards.
Carcinogenicity	: RNA 6000 Nano Gel Matrix	No known significant effects or critical hazards.
	RNA Nano Dye Concentrate	No known significant effects or critical hazards.
	RNA 6000 Nano Marker	No known significant effects or critical hazards.
	RNA 6000 Nano Ladder	No known significant effects or critical hazards.
Mutagenicity	: RNA 6000 Nano Gel Matrix	No known significant effects or critical hazards.
	RNA Nano Dye Concentrate	No known significant effects or critical hazards.
	RNA 6000 Nano Marker	No known significant effects or critical hazards.
	RNA 6000 Nano Ladder	No known significant effects or critical hazards.
Teratogenicity	: RNA 6000 Nano Gel Matrix	No known significant effects or critical hazards.
	RNA Nano Dye Concentrate	No known significant effects or critical hazards.
	RNA 6000 Nano Marker	No known significant effects or critical hazards.
	RNA 6000 Nano Ladder	No known significant effects or critical hazards.

Section 11. Toxicological information

Developmental effects	: RNA 6000 Nano Gel Matrix	No known significant effects or critical hazards.
	RNA Nano Dye Concentrate	No known significant effects or critical hazards.
	RNA 6000 Nano Marker	No known significant effects or critical hazards.
	RNA 6000 Nano Ladder	No known significant effects or critical hazards.
Fertility effects	: RNA 6000 Nano Gel Matrix	No known significant effects or critical hazards.
	RNA Nano Dye Concentrate	No known significant effects or critical hazards.
	RNA 6000 Nano Marker	No known significant effects or critical hazards.
	RNA 6000 Nano Ladder	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
RNA Nano Dye Concentrate Dimethyl sulfoxide	Acute LC50 25000 ppm Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 34000000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 100 µl/L Marine water	Algae - Ulva lactuca	72 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
RNA Nano Dye Concentrate Dimethyl sulfoxide	-1.35	3.16	low

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 Annex II of Marpol and the IBC Code : Not available.

Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

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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 (Annexes A, B, C, E)

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.
Canada	: All components are listed or exempted.
China	: Not determined.
Europe	: Not determined.
Japan	: <input checked="" type="checkbox"/> Japan inventory (ENCS): All components are listed or exempted. <input checked="" type="checkbox"/> Japan inventory (ISHL): All components are listed or exempted.
Malaysia	: Not determined.
New Zealand	: All components are listed or exempted.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: <input checked="" type="checkbox"/> All components are listed or exempted.
Thailand	: <input checked="" type="checkbox"/> Not determined.
Turkey	: <input checked="" type="checkbox"/> Not determined.
United States	: All components are listed or exempted.
Viet Nam	: <input checked="" type="checkbox"/> Not determined.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 17/05/2017
Date of previous issue : 10/06/2014.
Version : 7

Key to abbreviations

: ADG = Australian Dangerous Goods
 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)
 NOHSC = National Occupational Health and Safety Commission
 SUSMP = Standard Uniform Schedule of Medicine and Poisons
 UN = United Nations

Procedure used to derive the classification

Classification	Justification
Not classified.	

References : Not available.

✔ Indicates information that has changed from previously issued version.

Notice to reader

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