

# SAFETY DATA SHEET



PathDetect Elk1 trans Reporting System, Part number 219005

## Section 1. Identification

### 1.1 Product identifier

**Product name** : PathDetect Elk1 trans Reporting System, Part number 219005  
**Part No. (Chemical Kit)** : 219005  
**Part No.** : pFR-Luc Plasmid (Reporter Plasmid) 219050-51  
 pFA2-Elk1 Plasmid 219061-51  
 pFC2-dbd 219055-51  
 pFC-MEK1 Plasmid Positive Control 219064-51  
**Validation date** : 11/28/2016

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

**Material uses** : Analytical reagent.  
 pFR-Luc Plasmid (Reporter Plasmid) 0.05 ml (50 µg 1 µg/µl)  
 pFA2-Elk1 Plasmid 0.2 ml  
 pFC2-dbd 0.02 ml (2 µg 25ng/µl)  
 pFC-MEK1 Plasmid Positive Control 0.2 ml (5 µg 25 µg/µl)

### 1.3 Details of the supplier of the safety data sheet

**Supplier/Manufacturer** : Agilent Technologies, Inc.  
 5301 Stevens Creek Blvd  
 Santa Clara, CA 95051, USA  
 800-227-9770

### 1.4 Emergency telephone number

**In case of emergency** : CHEMTREC®: 1-800-424-9300

## Section 2. Hazards identification

### 2.1 Classification of the substance or mixture

**OSHA/HCS status** : pFR-Luc Plasmid (Reporter Plasmid) While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.  
 pFA2-Elk1 Plasmid While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.  
 pFC2-dbd While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.  
 pFC-MEK1 Plasmid Positive Control While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

## Section 2. Hazards identification

other users of this product.

### Classification of the substance or mixture

Not classified.

### 2.2 GHS label elements

<b>Signal word</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	No signal word. No signal word. No signal word. No signal word.
<b>Hazard statements</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	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.
<b><u>Precautionary statements</u></b>		
<b>Prevention</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Response</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Storage</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Disposal</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Supplemental label elements</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	None known. None known. None known. None known.

### 2.3 Other hazards

## Section 2. Hazards identification

<b>Hazards not otherwise classified</b>	:	pFR-Luc Plasmid (Reporter Plasmid)	None known.
		pFA2-Elk1 Plasmid	None known.
		pFC2-dbd	None known.
		pFC-MEK1 Plasmid Positive Control	None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	:	pFR-Luc Plasmid (Reporter Plasmid)	Mixture
		pFA2-Elk1 Plasmid	Mixture
		pFC2-dbd	Mixture
		pFC-MEK1 Plasmid Positive Control	Mixture

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no 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

### 4.1 Description of necessary first aid measures

<b>Eye contact</b>	:	pFR-Luc Plasmid (Reporter Plasmid)	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.
		pFA2-Elk1 Plasmid	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.
		pFC2-dbd	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.
		pFC-MEK1 Plasmid Positive Control	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>	:	pFR-Luc Plasmid (Reporter Plasmid)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		pFA2-Elk1 Plasmid	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		pFC2-dbd	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		pFC-MEK1 Plasmid Positive Control	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>	:	pFR-Luc Plasmid (Reporter Plasmid)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		pFA2-Elk1 Plasmid	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		pFC2-dbd	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get

## Section 4. First aid measures

	pFC-MEK1 Plasmid Positive Control	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>	: pFR-Luc Plasmid (Reporter Plasmid)	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.
	pFA2-Elk1 Plasmid	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.
	pFC2-dbd	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.
	pFC-MEK1 Plasmid Positive Control	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.

### 4.2 Most important symptoms/effects, acute and delayed

#### Potential acute health effects

<b>Eye contact</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	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.
<b>Inhalation</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	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.
<b>Skin contact</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	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 4. First aid measures

<b>Ingestion</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	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

<b>Eye contact</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	No specific data. No specific data. No specific data. No specific data.
--------------------	--	--

<b>Inhalation</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	No specific data. No specific data. No specific data. No specific data.
-------------------	--	--

<b>Skin contact</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	No specific data. No specific data. No specific data. No specific data.
---------------------	--	--

<b>Ingestion</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	No specific data. No specific data. No specific data. No specific data.
------------------	--	--

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

<b>Notes to physician</b>	: pFR-Luc Plasmid (Reporter Plasmid)  pFA2-Elk1 Plasmid  pFC2-dbd  pFC-MEK1 Plasmid Positive Control	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.
---------------------------	--	--

<b>Specific treatments</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	No specific treatment. No specific treatment. No specific treatment. No specific treatment.
----------------------------	--	--

## Section 4. First aid measures

<b>Protection of first-aiders</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid  pFC2-dbd  pFC-MEK1 Plasmid Positive Control	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. Fire-fighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid  pFC2-dbd  pFC-MEK1 Plasmid Positive Control	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	None known.  None known. None known. None known.

### 5.2 Special hazards arising from the substance or mixture

<b>Specific hazards arising from the chemical</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid  pFC2-dbd  pFC-MEK1 Plasmid Positive Control	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. 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>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	No specific data.  No specific data. No specific data.

### 5.3 Advice for firefighters

<b>Special protective actions for fire-fighters</b>	: pFR-Luc Plasmid (Reporter Plasmid)   pFA2-Elk1 Plasmid   pFC2-dbd	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. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No
---	---	---

## Section 5. Fire-fighting measures

### Special protective equipment for fire-fighters

pFC-MEK1 Plasmid Positive Control

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.

: pFR-Luc Plasmid (Reporter Plasmid)

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

pFA2-Elk1 Plasmid

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

pFC2-dbd

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

pFC-MEK1 Plasmid Positive Control

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

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

: pFR-Luc Plasmid (Reporter Plasmid)

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.

pFA2-Elk1 Plasmid

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.

pFC2-dbd

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.

pFC-MEK1 Plasmid Positive Control

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.

**For emergency responders** : pFR-Luc Plasmid (Reporter Plasmid)

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". 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". If specialized clothing is required to deal with the

pFA2-Elk1 Plasmid

pFC2-dbd

## Section 6. Accidental release measures

spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". 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".

pFC-MEK1 Plasmid Positive Control

### 6.2 Environmental precautions

: pFR-Luc Plasmid (Reporter Plasmid)

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).

pFA2-Elk1 Plasmid

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).

pFC2-dbd

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).

pFC-MEK1 Plasmid Positive Control

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).

### 6.3 Methods and materials for containment and cleaning up

**Methods for cleaning up** : pFR-Luc Plasmid (Reporter Plasmid)

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.

pFA2-Elk1 Plasmid

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.

pFC2-dbd

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.

pFC-MEK1 Plasmid Positive Control

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

### 7.1 Precautions for safe handling

<b>Protective measures</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid  pFC2-dbd  pFC-MEK1 Plasmid Positive Control	Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). 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>	: pFR-Luc Plasmid (Reporter Plasmid)       pFA2-Elk1 Plasmid       pFC2-dbd       pFC-MEK1 Plasmid Positive Control	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. 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. 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>7.2 Conditions for safe storage, including any incompatibilities</b>	: pFR-Luc Plasmid (Reporter Plasmid)       pFA2-Elk1 Plasmid	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. 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

## Section 7. Handling and storage

pFC2-dbd

environmental contamination.

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.

pFC-MEK1 Plasmid Positive Control

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.

### 7.3 Specific end use(s)

#### Recommendations

: pFR-Luc Plasmid (Reporter Plasmid)  
pFA2-Elk1 Plasmid  
pFC2-dbd  
pFC-MEK1 Plasmid Positive Control

Industrial applications, Professional applications.

Industrial applications, Professional applications.

Industrial applications, Professional applications.

Industrial applications, Professional applications.

#### Industrial sector specific solutions

: pFR-Luc Plasmid (Reporter Plasmid)  
pFA2-Elk1 Plasmid  
pFC2-dbd  
pFC-MEK1 Plasmid Positive Control

Not applicable.

Not applicable.

Not applicable.

Not applicable.

## Section 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
None.	

### 8.2 Exposure controls

#### 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/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

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	Liquid. Liquid. Liquid. Liquid.
<b>Color</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	Not available. Not available. Not available. Not available.
<b>Odor</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	Not available. Not available. Not available. Not available.
<b>Odor threshold</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	Not available. Not available. Not available. Not available.
<b>pH</b>	:	

## Section 9. Physical and chemical properties

	pFR-Luc Plasmid (Reporter Plasmid)	7.5
	pFA2-Elk1 Plasmid	7.5
	pFC2-dbd	7.5
	pFC-MEK1 Plasmid Positive Control	7.5
<b>Melting point</b>	: pFR-Luc Plasmid (Reporter Plasmid)	0°C (32°F)
	pFA2-Elk1 Plasmid	0°C (32°F)
	pFC2-dbd	0°C (32°F)
	pFC-MEK1 Plasmid Positive Control	0°C (32°F)
<b>Boiling point</b>	: pFR-Luc Plasmid (Reporter Plasmid)	100°C (212°F)
	pFA2-Elk1 Plasmid	100°C (212°F)
	pFC2-dbd	100°C (212°F)
	pFC-MEK1 Plasmid Positive Control	100°C (212°F)
<b>Flash point</b>	: pFR-Luc Plasmid (Reporter Plasmid)	Not available.
	pFA2-Elk1 Plasmid	Not available.
	pFC2-dbd	Not available.
	pFC-MEK1 Plasmid Positive Control	Not available.
<b>Evaporation rate</b>	: pFR-Luc Plasmid (Reporter Plasmid)	Not available.
	pFA2-Elk1 Plasmid	Not available.
	pFC2-dbd	Not available.
	pFC-MEK1 Plasmid Positive Control	Not available.
<b>Flammability (solid, gas)</b>	: pFR-Luc Plasmid (Reporter Plasmid)	Not applicable.
	pFA2-Elk1 Plasmid	Not applicable.
	pFC2-dbd	Not applicable.
	pFC-MEK1 Plasmid Positive Control	Not applicable.
<b>Lower and upper explosive (flammable) limits</b>	: pFR-Luc Plasmid (Reporter Plasmid)	Not available.
	pFA2-Elk1 Plasmid	Not available.
	pFC2-dbd	Not available.
	pFC-MEK1 Plasmid Positive Control	Not available.
<b>Vapor pressure</b>	: pFR-Luc Plasmid (Reporter Plasmid)	Not available.
	pFA2-Elk1 Plasmid	Not available.
	pFC2-dbd	Not available.
	pFC-MEK1 Plasmid Positive Control	Not available.
<b>Vapor density</b>	: pFR-Luc Plasmid (Reporter Plasmid)	Not available.
	pFA2-Elk1 Plasmid	Not available.
	pFC2-dbd	Not available.
	pFC-MEK1 Plasmid Positive Control	Not available.

## Section 9. Physical and chemical properties

<b>Relative density</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	Not available. Not available. Not available. Not available.
<b>Solubility</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid  pFC2-dbd  pFC-MEK1 Plasmid Positive Control	Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	Not available. Not available. Not available. Not available.
<b>Auto-ignition temperature</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	Not available. Not available. Not available. Not available.
<b>Decomposition temperature</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	Not available. Not available. Not available. Not available.
<b>Viscosity</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	Not available. Not available. Not available. Not available.

## Section 10. Stability and reactivity

<b>10.1 Reactivity</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid  pFC2-dbd  pFC-MEK1 Plasmid Positive Control	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. 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>10.2 Chemical stability</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	The product is stable. The product is stable. The product is stable. The product is stable.

## Section 10. Stability and reactivity

<b>10.3 Possibility of hazardous reactions</b>	<ul style="list-style-type: none"> <li>: pFR-Luc Plasmid (Reporter Plasmid)</li> <li>pFA2-Elk1 Plasmid</li> <li>pFC2-dbd</li> <li>pFC-MEK1 Plasmid Positive Control</li> </ul>	<p>Under normal conditions of storage and use, hazardous reactions will not occur.</p> <p>Under normal conditions of storage and use, hazardous reactions will not occur.</p> <p>Under normal conditions of storage and use, hazardous reactions will not occur.</p> <p>Under normal conditions of storage and use, hazardous reactions will not occur.</p>
<b>10.4 Conditions to avoid</b>	<ul style="list-style-type: none"> <li>: pFR-Luc Plasmid (Reporter Plasmid)</li> <li>pFA2-Elk1 Plasmid</li> <li>pFC2-dbd</li> <li>pFC-MEK1 Plasmid Positive Control</li> </ul>	<p>No specific data.</p> <p>No specific data.</p> <p>No specific data.</p> <p>No specific data.</p>
<b>10.5 Incompatible materials</b>	<ul style="list-style-type: none"> <li>: pFR-Luc Plasmid (Reporter Plasmid)</li> <li>pFA2-Elk1 Plasmid</li> <li>pFC2-dbd</li> <li>pFC-MEK1 Plasmid Positive Control</li> </ul>	<p>May react or be incompatible with oxidizing materials.</p> <p>May react or be incompatible with oxidizing materials.</p> <p>May react or be incompatible with oxidizing materials.</p> <p>May react or be incompatible with oxidizing materials.</p>
<b>10.6 Hazardous decomposition products</b>	<ul style="list-style-type: none"> <li>: pFR-Luc Plasmid (Reporter Plasmid)</li> <li>pFA2-Elk1 Plasmid</li> <li>pFC2-dbd</li> <li>pFC-MEK1 Plasmid Positive Control</li> </ul>	<p>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</p> <p>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</p> <p>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</p> <p>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</p>

## Section 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Not available.

#### Irritation/Corrosion

Not available.

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

## Section 11. Toxicological information

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.

<b>Information on the likely routes of exposure</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	Not available.  Not available. Not available. Not available.
 <b><u>Potential acute health effects</u></b>		
<b>Eye contact</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	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.
<b>Inhalation</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	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.
<b>Skin contact</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	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.
<b>Ingestion</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	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.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Eye contact</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	No specific data.  No specific data. No specific data. No specific data.
--------------------	--	--

## Section 11. Toxicological information

<b>Inhalation</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	No specific data. No specific data. No specific data. No specific data.
<b>Skin contact</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	No specific data. No specific data. No specific data. No specific data.
<b>Ingestion</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	No specific data. No specific data. 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

<b>General</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	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.
<b>Carcinogenicity</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	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.
<b>Mutagenicity</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	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.
<b>Teratogenicity</b>	: pFR-Luc Plasmid (Reporter Plasmid) pFA2-Elk1 Plasmid pFC2-dbd pFC-MEK1 Plasmid Positive Control	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

<b>Developmental effects</b>	: pFR-Luc Plasmid (Reporter Plasmid)	No known significant effects or critical hazards.
	pFA2-Elk1 Plasmid	No known significant effects or critical hazards.
	pFC2-dbd	No known significant effects or critical hazards.
	pFC-MEK1 Plasmid Positive Control	No known significant effects or critical hazards.
<b>Fertility effects</b>	: pFR-Luc Plasmid (Reporter Plasmid)	No known significant effects or critical hazards.
	pFA2-Elk1 Plasmid	No known significant effects or critical hazards.
	pFC2-dbd	No known significant effects or critical hazards.
	pFC-MEK1 Plasmid Positive Control	No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### 12.1 Toxicity

Not available.

### 12.2 Persistence and degradability

Not available.

### 12.3 Bioaccumulative potential

Not available.

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

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

## Section 13. Disposal considerations

### 13.1 Waste treatment methods

**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 13. Disposal considerations

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## Section 14. Transport information

### Regulatory information

DOT / IMDG / IATA : Not regulated.

## Section 15. Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

**U.S. Federal regulations** : **United States inventory (TSCA 8b)**: All components are listed or exempted.  
**Clean Water Act (CWA) 311**: Edetic acid

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Not applicable.

#### Composition/information on ingredients

No products were found.

### State regulations

**Massachusetts** : None of the components are listed.

**New York** : None of the components are listed.

**New Jersey** : None of the components are listed.

**Pennsylvania** : None of the components are listed.

### California Prop. 65

No products were found.

### International regulations

## Section 15. Regulatory information

### [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](#)

<a href="#">Australia</a>	: All components are listed or exempted.
<a href="#">Canada inventory</a>	: All components are listed or exempted.
<a href="#">China</a>	: All components are listed or exempted.
<a href="#">Europe</a>	: All components are listed or exempted.
<a href="#">Japan</a>	: <b>Japan inventory (ENCS)</b> : All components are listed or exempted. <b>Japan inventory (ISHL)</b> : All components are listed or exempted.
<a href="#">Malaysia</a>	: Not determined.
<a href="#">New Zealand</a>	: All components are listed or exempted.
<a href="#">Philippines</a>	: All components are listed or exempted.
<a href="#">Republic of Korea</a>	: All components are listed or exempted.
<a href="#">Taiwan</a>	: All components are listed or exempted.
<a href="#">Turkey</a>	: Not determined.

## Section 16. Other information

### [History](#)

<a href="#">Date of issue</a>	: 11/28/2016
<a href="#">Date of previous issue</a>	: 04/26/2013.
<a href="#">Version</a>	: 3

✔ Indicates information that has changed from previously issued version.

### [Notice to reader](#)

**Disclaimer:** The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.