

# SAFETY DATA SHEET



SureDirect Blood PCR Kit, Part Number 600920

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

<b>Product name</b>	: SureDirect Blood PCR Kit, Part Number 600920		
<b>CAS number</b>	: <input checked="" type="checkbox"/> DMSO	67-68-5	
	SureDirect Blood PCR	2X MM	Not applicable.
	10X Control Primers +	Template	Not applicable.
<b>Part no. (chemical kit)</b>	: 600920		
<b>Part no.</b>	: DMSO	600260-53	
	SureDirect Blood PCR	2X MM	600920-51
	10X Control Primers +	Template	600920-52

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

<b>Identified uses</b>	: <input checked="" type="checkbox"/> Analytical reagent.		
	<input checked="" type="checkbox"/> DMSO	1 ml	
	SureDirect Blood PCR 2X MM	1.3 ml (100 reactions)	
	10X Control Primers + Template	0.02 ml (100 reactions 20 µl)	
<b>Uses advised against</b>	: None known.		

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

Agilent Technologies LDA UK Ltd.  
 5500 Lakeside Cheadle Royal Business Park,  
 Cheadle, Cheshire, SK8 3GR  
 United Kingdom  
 Tel: +44 (0) 345 712 5292  
**e-mail address of person responsible for this SDS** : pdl-msds\_author@agilent.com

### 1.4 Emergency telephone number

**Emergency telephone number (with hours of operation)** : CHEMTREC®: +(44)-870-8200418

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

<b>Product definition</b>	: DMSO	Mono-constituent substance
	SureDirect Blood PCR	Mixture
	2X MM	
	10X Control Primers +	Mixture
	Template	

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

<input checked="" type="checkbox"/> DMSO	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureDirect Blood PCR 2X MM	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
10X Control Primers + Template	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

## SECTION 2: Hazards identification

<b>Ingredients of unknown toxicity</b>	: <input checked="" type="checkbox"/> SureDirect Blood PCR 2X MM	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 1 - 10% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60% Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 1 - 10% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%
	10X Control Primers + Template	
<b>Ingredients of unknown ecotoxicity</b>	: <input checked="" type="checkbox"/> SureDirect Blood PCR 2X MM	Contains 1% of components with unknown hazards to the aquatic environment

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

<b>Signal word</b>	: <input checked="" type="checkbox"/> M SureDirect Blood PCR 2X MM 10X Control Primers + Template	No signal word. No signal word. No signal word.
<b>Hazard statements</b>	: <input checked="" type="checkbox"/> M SureDirect Blood PCR 2X MM 10X Control Primers + Template	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

### Precautionary statements

<b>Prevention</b>	: <input checked="" type="checkbox"/> M SureDirect Blood PCR 2X MM 10X Control Primers + Template	Not applicable. Not applicable. Not applicable.
<b>Response</b>	: <input checked="" type="checkbox"/> M SureDirect Blood PCR 2X MM 10X Control Primers + Template	Not applicable. Not applicable. Not applicable.
<b>Storage</b>	: <input checked="" type="checkbox"/> M SureDirect Blood PCR 2X MM 10X Control Primers + Template	Not applicable. Not applicable. Not applicable.
<b>Disposal</b>	: <input checked="" type="checkbox"/> M SureDirect Blood PCR 2X MM 10X Control Primers + Template	Not applicable. Not applicable. Not applicable.
<b>Supplemental label elements</b>	: <input checked="" type="checkbox"/> M SureDirect Blood PCR 2X MM 10X Control Primers + Template	Not applicable. Safety data sheet available on request. Not applicable.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: <input checked="" type="checkbox"/> M SureDirect Blood PCR 2X MM 10X Control Primers + Template	Not applicable. Not applicable. Not applicable.

### Special packaging requirements

SureDirect Blood PCR Kit, Part Number 600920

## SECTION 2: Hazards identification

<b>Containers to be fitted with child-resistant fastenings</b>	: <input checked="" type="checkbox"/> DMSO	Not applicable.
	SureDirect Blood PCR 2X MM	Not applicable.
	10X Control Primers + Template	Not applicable.
<b>Tactile warning of danger</b>	: <input checked="" type="checkbox"/> DMSO	Not applicable.
	SureDirect Blood PCR 2X MM	Not applicable.
	10X Control Primers + Template	Not applicable.

### 2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

	PBT	P	B	T	vPvB	vP	vB
<input checked="" type="checkbox"/> DMSO	No	N/A	No	No	No	N/A	No

SureDirect Blood PCR 2X MM This mixture does not contain any substances that are assessed to be a PBT or a vPvB.  
 10X Control Primers + Template This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification

: <input checked="" type="checkbox"/> DMSO	None known.
SureDirect Blood PCR 2X MM	None known.
10X Control Primers + Template	None known.

## SECTION 3: Composition/information on ingredients

<b>3.1 Substances</b>	: DMSO	Mono-constituent substance
	SureDirect Blood PCR 2X MM	Mixture
	10X Control Primers + Template	Mixture

Product/ingredient name	Identifiers	%	Classification	Type
<input checked="" type="checkbox"/> DMSO Dimethyl sulfoxide	EC: 200-664-3 CAS: 67-68-5	100	Not classified.	[1]
<b>SureDirect Blood PCR 2X MM</b> Glycerol	UK (GB) REACH #: Annex V REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.  <b>See Section 16 for the full text of the H statements declared above.</b>	[1]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.





#### Type

<input checked="" type="checkbox"/> DMSO	[1] Constituent
SureDirect Blood PCR 2X MM	[1] Substance with a workplace exposure limit

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


## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<b>Eye contact</b>	:  DMSO	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.
	SureDirect Blood PCR 2X MM	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.
	10X Control Primers + Template	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>	:  DMSO	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	SureDirect Blood PCR 2X MM	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	10X Control Primers + Template	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Skin contact</b>	:  DMSO	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureDirect Blood PCR 2X MM	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	10X Control Primers + Template	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
<b>Ingestion</b>	:  DMSO	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.
	SureDirect Blood PCR 2X MM	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.
	10X Control Primers + Template	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.
<b>Protection of first-aiders</b>	:  DMSO	No action shall be taken involving any personal risk or without suitable training.
	SureDirect Blood PCR 2X MM	No action shall be taken involving any personal risk or without suitable training.
	10X Control Primers + Template	No action shall be taken involving any personal risk or without suitable training.

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

#### Over-exposure signs/symptoms

<b>Eye contact</b>	:  DMSO	No specific data.
	SureDirect Blood PCR 2X MM	No specific data.
	10X Control Primers + Template	No specific data.

## SECTION 4: First aid measures

<b>Inhalation</b>	: <input checked="" type="checkbox"/> MSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	No specific data. No specific data. No specific data.
<b>Skin contact</b>	: <input checked="" type="checkbox"/> MSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	No specific data. No specific data. No specific data.
<b>Ingestion</b>	: <input checked="" type="checkbox"/> MSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	No specific data. No specific data. No specific data.

### 4.3 Indication of any immediate medical attention and special treatment needed

<b>Notes to physician</b>	: <input checked="" type="checkbox"/> MSO  SureDirect Blood PCR 2X MM  10X Control Primers + Template	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Specific treatments</b>	: <input checked="" type="checkbox"/> MSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	No specific treatment. No specific treatment. No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: <input checked="" type="checkbox"/> MSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	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>	: <input checked="" type="checkbox"/> MSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	None known. None known. None known.

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


<b>Hazards from the substance or mixture</b>	: <input checked="" type="checkbox"/> MSO  SureDirect Blood PCR 2X MM 10X Control Primers + Template	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 combustion products</b>	: <input checked="" type="checkbox"/> MSO  SureDirect Blood PCR 2X MM	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides

**SECTION 5: Firefighting measures**


10X Control Primers + Template	sulfur oxides metal oxide/oxides Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides halogenated compounds
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**5.3 Advice for firefighters**

**Special protective actions for fire-fighters**

:  MSO	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.
SureDirect Blood PCR 2X MM	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.
10X Control Primers + Template	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**

:  MSO	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureDirect Blood PCR 2X MM	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
10X Control Primers + Template	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**

:  MSO	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.
SureDirect Blood PCR 2X MM	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.
10X Control Primers + Template	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**

:  MSO	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".
SureDirect Blood PCR 2X MM	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".
10X Control Primers + Template	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".

## SECTION 6: Accidental release measures

<b>6.2 Environmental precautions</b>	: DMSO	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).
	SureDirect Blood PCR 2X MM	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).
	10X Control Primers + Template	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).

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

<b>Methods for cleaning up</b>	: DMSO	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.
	SureDirect Blood PCR 2X MM	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.
	10X Control Primers + Template	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.

<b>6.4 Reference to other sections</b>	: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.
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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

<b>Protective measures</b>	: DMSO	Put on appropriate personal protective equipment (see Section 8).
	SureDirect Blood PCR 2X MM	Put on appropriate personal protective equipment (see Section 8).
	10X Control Primers + Template	Put on appropriate personal protective equipment (see Section 8).
<b>Advice on general occupational hygiene</b>	: DMSO	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.
	SureDirect Blood PCR 2X MM	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.
	10X Control Primers + Template	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.

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## SECTION 7: Handling and storage

### 7.2 Conditions for safe storage, including any incompatibilities

<b>Storage</b>	: <input checked="" type="checkbox"/> DMSO	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.
	SureDirect Blood PCR 2X MM	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.
	10X Control Primers + Template	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.

### 7.3 Specific end use(s)

<b>Recommendations</b>	: DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications.
<b>Industrial sector specific solutions</b>	: <input checked="" type="checkbox"/> DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	Not available. Not available. Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
SureDirect Blood PCR 2X MM Glycerol	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Mist

#### Biological exposure indices

No exposure indices known.

**Recommended monitoring procedures** :  Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### DNELs/DMELs

## SECTION 8: Exposure controls/personal protection

Product/ingredient name	Type	Exposure	Value	Population	Effects
<b>DMSO</b> Dimethyl sulfoxide	DNEL	Long term Inhalation	47 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Oral	60 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	100 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	120 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	200 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	265 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	484 mg/m <sup>3</sup>	Workers	Systemic
<b>SureDirect Blood PCR 2X MM</b> Glycerol	DNEL	Long term Inhalation	33 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	56 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Oral	229 mg/kg bw/day	General population	Systemic

### PNECs

No PNECs available

### 8.2 Exposure controls

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

#### 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 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.

## SECTION 9: Physical and chemical properties

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

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	:	DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	Liquid. [Clear.] Liquid.  Liquid.
<b>Colour</b>	:	DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	Colourless. Not available.  Not available.
<b>Odour</b>	:	DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	Odourless. [Slight] Not available.  Not available.
<b>Odour threshold</b>	:	DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	Not available. Not available.  Not available.
<b>Melting point/freezing point</b>	:	DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	18.5°C Not available.  0°C
<b>Initial boiling point and boiling range</b>	:	DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	189°C Not available.  100°C
<b>Flammability</b>	:	DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	Not applicable. Not applicable.  Not applicable.
<b>Upper/lower flammability or explosive limits</b>	:	DMSO  SureDirect Blood PCR 2X MM 10X Control Primers + Template	Lower: 2.6% Upper: 28.5% Not available.  Not available.
<b>Flash point</b>	:	DMSO  SureDirect Blood PCR 2X MM 10X Control Primers + Template	Closed cup: 87°C [ASTM D 93] Open cup: 87°C Not available.  Not available.

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**SECTION 9: Physical and chemical properties**

Ingredient name	Closed cup		Open cup	
	°C	Method	°C	Method
SureDirect Blood PCR 2X MM glycerol	-	-	177	-

**Auto-ignition temperature** :  DMSO 300 to 302°C

Ingredient name	°C	Method
SureDirect Blood PCR 2X MM glycerol	370	-

**Decomposition temperature** : DMSO 140 to 189°C  
SureDirect Blood PCR 2X MM Not available.

10X Control Primers + Template Not available.

**pH** : DMSO Not available.  
SureDirect Blood PCR 2X MM 10

10X Control Primers + Template 8

**Viscosity** :  DMSO Dynamic: 2.14 mPa·s  
SureDirect Blood PCR 2X MM Not available.

10X Control Primers + Template Not available.

Solubility(ies)	Media	Result
	<input checked="" type="checkbox"/> DMSO	Soluble
	water	
	SureDirect Blood PCR 2X MM	
	water	Soluble
	10X Control Primers + Template	
	water	Soluble

**Partition coefficient: n-octanol/water** :  DMSO -1.35  
SureDirect Blood PCR 2X MM Not applicable.

10X Control Primers + Template Not applicable.

**Vapour pressure** :  DMSO 0.056 kPa (0.42 mm Hg) [EU A.4]

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
SureDirect Blood PCR 2X MM						
water	17.5	2.3	-	92.258	12.3	-
glycerol	0.000075	0.00001	-	0.0025	0.00033	-
10X Control Primers + Template						
water	17.5	2.3	-	92.258	12.3	-

## SECTION 9: Physical and chemical properties

<b>Evaporation rate</b>	: DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	0.026 (butyl acetate = 1) Not available. Not available.
<b>Relative density</b>	: DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	1.1 Not available. Not available.
<b>Vapour density</b>	: DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	2.7 [Air = 1] Not available. Not available.
<b>Explosive properties</b>	: DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	Not available. Not available. Not available.
<b>Oxidising properties</b>	: DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	Not available. Not available. Not available.

### Particle characteristics

<b>Median particle size</b>	: <input checked="" type="checkbox"/> DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	Not applicable. Not applicable. Not applicable.
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### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: <input checked="" type="checkbox"/> DMSO  SureDirect Blood PCR 2X MM 10X Control Primers + Template	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>	: <input checked="" type="checkbox"/> DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	The product is stable. The product is stable. The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: <input checked="" type="checkbox"/> DMSO  SureDirect Blood PCR 2X MM 10X Control Primers + Template	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.

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## SECTION 10: Stability and reactivity

<b>10.4 Conditions to avoid</b>	: <input checked="" type="checkbox"/> DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	No specific data. No specific data. No specific data.
<b>10.5 Incompatible materials</b>	: <input checked="" type="checkbox"/> DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials.
<b>10.6 Hazardous decomposition products</b>	: <input checked="" type="checkbox"/> DMSO SureDirect Blood PCR 2X MM 10X Control Primers + Template	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. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<input checked="" type="checkbox"/> DMSO Dimethyl sulfoxide	LD50 Dermal LD50 Oral	Rat Rat	40000 mg/kg 14500 mg/kg	- -
<b>SureDirect Blood PCR 2X MM</b> Glycerol	LD50 Oral	Rat	12600 mg/kg	-

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
<input checked="" type="checkbox"/> DMSO Dimethyl sulfoxide	14500	40000	N/A	N/A	N/A
<b>SureDirect Blood PCR 2X MM</b> Glycerol	12600	N/A	N/A	N/A	N/A

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<input checked="" type="checkbox"/> DMSO Dimethyl sulfoxide	Eyes - Mild irritant Eyes - Mild irritant	Rabbit Rabbit	- -	100 mg 24 hours 500 mg	- -
	Skin - Mild irritant Skin - Mild irritant	Rabbit Rabbit	- -	100 mg 24 hours 500 mg	- -
<b>SureDirect Blood PCR 2X MM</b> Glycerol	Eyes - Mild irritant Skin - Mild irritant	Rabbit Rabbit	- -	24 hours 500 mg 24 hours 500 mg	- -

#### Sensitiser

## SECTION 11: Toxicological information

**Conclusion/Summary** : Not available.

### Mutagenicity

**Conclusion/Summary** : Not available.

### Carcinogenicity

**Conclusion/Summary** : Not available.

### Reproductive toxicity

**Conclusion/Summary** : Not available.

### Teratogenicity

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on likely routes of exposure** :  DMSO Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.  
 SureDirect Blood PCR Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.  
 2X MM  
 10X Control Primers + Not available.  
 Template

### Potential acute health effects

**Inhalation** :  DMSO No known significant effects or critical hazards.  
 SureDirect Blood PCR No known significant effects or critical hazards.  
 2X MM  
 10X Control Primers + No known significant effects or critical hazards.  
 Template

**Ingestion** :  DMSO No known significant effects or critical hazards.  
 SureDirect Blood PCR No known significant effects or critical hazards.  
 2X MM  
 10X Control Primers + No known significant effects or critical hazards.  
 Template

**Skin contact** :  DMSO No known significant effects or critical hazards.  
 SureDirect Blood PCR No known significant effects or critical hazards.  
 2X MM  
 10X Control Primers + No known significant effects or critical hazards.  
 Template

**Eye contact** :  DMSO No known significant effects or critical hazards.  
 SureDirect Blood PCR No known significant effects or critical hazards.  
 2X MM  
 10X Control Primers + No known significant effects or critical hazards.  
 Template

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

**Inhalation** :  DMSO No specific data.  
 SureDirect Blood PCR No specific data.  
 2X MM  
 10X Control Primers + No specific data.  
 Template

**Ingestion** :  DMSO No specific data.  
 SureDirect Blood PCR No specific data.  
 2X MM  
 10X Control Primers + No specific data.  
 Template

## SECTION 11: Toxicological information

<b>Skin contact</b>	: <input checked="" type="checkbox"/> DMSO	No specific data.
	SureDirect Blood PCR	No specific data.
	2X MM	
	10X Control Primers + Template	No specific data.
<b>Eye contact</b>	: <input checked="" type="checkbox"/> DMSO	No specific data.
	SureDirect Blood PCR	No specific data.
	2X MM	
	10X Control Primers + Template	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

**Conclusion/Summary** : Not available.

<b>General</b>	: <input checked="" type="checkbox"/> DMSO	No known significant effects or critical hazards.
	SureDirect Blood PCR	No known significant effects or critical hazards.
	2X MM	
	10X Control Primers + Template	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: <input checked="" type="checkbox"/> DMSO	No known significant effects or critical hazards.
	SureDirect Blood PCR	No known significant effects or critical hazards.
	2X MM	
	10X Control Primers + Template	No known significant effects or critical hazards.
<b>Mutagenicity</b>	: <input checked="" type="checkbox"/> DMSO	No known significant effects or critical hazards.
	SureDirect Blood PCR	No known significant effects or critical hazards.
	2X MM	
	10X Control Primers + Template	No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: <input checked="" type="checkbox"/> DMSO	No known significant effects or critical hazards.
	SureDirect Blood PCR	No known significant effects or critical hazards.
	2X MM	
	10X Control Primers + Template	No known significant effects or critical hazards.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<input checked="" type="checkbox"/> DMSO Dimethyl sulfoxide	Acute LC50 25000 ppm Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> - Neonate	48 hours
	Acute LC50 34000000 µg/l Fresh water	Fish - Fathead minnow - <i>Pimephales promelas</i>	96 hours
	Chronic NOEC 100 µl/L Marine water	Algae - Green algae - <i>Ulva lactuca</i>	72 hours
	Chronic NOEC 100 µl/L Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> - Juvenile (Fledgling, Hatchling, Weanling)	21 days

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## SECTION 12: Ecological information

<b>SureDirect Blood PCR 2X MM</b> Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Trout - <i>Oncorhynchus mykiss</i>	96 hours
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**Conclusion/Summary** : Not available.

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
<b>DMSO</b> Dimethyl sulfoxide	OECD 301D Ready Biodegradability - Closed Bottle Test	31 % - Not readily - 28 days	-	-
<b>SureDirect Blood PCR 2X MM</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

**Conclusion/Summary** : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>DMSO</b> Dimethyl sulfoxide	-	-	Not readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>DMSO</b> Dimethyl sulfoxide	-1.35	3.16	Low
<b>SureDirect Blood PCR 2X MM</b> Glycerol	-1.76	-	Low

### 12.4 Mobility in soil

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

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
<b>DMSO</b> Dimethyl sulfoxide	No	N/A	No	No	No	N/A	No

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

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : 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.

**Hazardous waste** : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : 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

	ADR/RID	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No.	No.	No.

### Additional information

**14.6 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.

**14.7 Transport in bulk according to IMO instruments** : Not available.

## SECTION 15: Regulatory information

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

#### UK (GB)/REACH

#### Annex XIV - List of substances subject to authorisation

##### Annex XIV

None of the components are listed.

##### Substances of very high concern

None of the components are listed.

##### Ozone depleting substances

## SECTION 15: Regulatory information

Not listed.

### Prior Informed Consent (PIC)

Not listed.

### Persistent Organic Pollutants

Not listed.

### Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

No listed substance

**Label** :  MSO Not applicable.  
SureDirect Blood PCR 2X MM Not applicable.  
10X Control Primers + Not applicable.  
Template

### Seveso Directive

This product is not controlled under the Seveso Directive.

### EU regulations

**Industrial emissions (integrated pollution prevention and control) - Air** : Listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments might still be required.

### 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

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

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
DMEL = Derived Minimal Effect Level  
DNEL = Derived No Effect Level  
EUH statement = CLP-specific Hazard statement  
N/A = Not available  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration

**SECTION 16: Other information**

RRN = REACH Registration Number  
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
Not classified.	

Full text of abbreviated H statements

Not applicable.

Full text of classifications

Not applicable.

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