

SAFETY DATA SHEET

ReadyCal-Kit PEOPEG, 3 x 10 Vials, 1.5ml, Part Number PSS-PEOKITR1

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

1.1 Product identifier

Product name	: ReadyCal-Kit PEOPEG, 3 x 10 Vials, 1.5ml, Part Number PSS-PEOKITR1	
CAS number	: <input checked="" type="checkbox"/> Blue	25322-68-3
	: Black	25322-68-3
	: Yellow	Not applicable.
Part no. (chemical kit)	: PSS-PEOKITR1	
Part no.	: <input checked="" type="checkbox"/> Blue	Not available.
	: Black	Not available.
	: Yellow	Not available.

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

Identified uses	: <input checked="" type="checkbox"/> Reagents and Standards for Analytical Chemistry Laboratory Use	
	: <input checked="" type="checkbox"/> Blue	10 vials, 1.5 ml
	: Black	10 vials, 1.5 ml
	: Yellow	10 vials, 1.5 ml
Uses advised against	: None known.	

1.3 Details of the supplier of the safety data sheet

Agilent Technologies Deutschland GmbH
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
0800 603 1000

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

Product definition	: <input checked="" type="checkbox"/> Blue	Mono-constituent substance
	: Black	Mono-constituent substance
	: Yellow	Mixture

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

Yellow

H315	SKIN CORROSION/IRRITATION	Category 2
H319	SERIOUS EYE DAMAGE/EYE IRRITATION	Category 2
H335	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation)	Category 3


<input checked="" type="checkbox"/> Blue	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.	
Black	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.	
Yellow	The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.	

SECTION 2: Hazards identification

Ingredients of unknown toxicity	: <input checked="" type="checkbox"/> Yellow	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 10 - 30% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: > 60% Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 10 - 30%
Ingredients of unknown ecotoxicity	: <input checked="" type="checkbox"/> Yellow	Contains 25% 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

Hazard pictograms	: <input checked="" type="checkbox"/> Yellow	
Signal word	: <input checked="" type="checkbox"/> Blue Black Yellow	No signal word. No signal word. Warning
Hazard statements	: <input checked="" type="checkbox"/> Blue Black Yellow	No known significant effects or critical hazards. No known significant effects or critical hazards. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation.
<u>Precautionary statements</u>		
Prevention	: <input checked="" type="checkbox"/> Blue Black Yellow	Not applicable. Not applicable. P280 - Wear protective gloves. Wear eye or face protection. P261 - Avoid breathing vapour. P264 - Wash thoroughly after handling.
Response	: <input checked="" type="checkbox"/> Blue Black Yellow	Not applicable. Not applicable. P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.
Storage	: <input checked="" type="checkbox"/> Blue Black Yellow	Not applicable. Not applicable. P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
Disposal	: <input checked="" type="checkbox"/> Blue Black Yellow	Not applicable. Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	: <input checked="" type="checkbox"/> Yellow	3,6,9,12-tetraoxatetradecane-1,14-diol
Supplemental label elements	: <input checked="" type="checkbox"/> Blue Black Yellow	Not applicable. Not applicable. Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: <input checked="" type="checkbox"/> Blue Black Yellow	Not applicable. Not applicable. Not applicable.
<u>Special packaging requirements</u>		
Tactile warning of danger	: <input checked="" type="checkbox"/> Blue Black Yellow	Not applicable. Not applicable. Not applicable.

SECTION 2: Hazards identification

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"/> Blue No	N/A	No	No	No	N/A	No
<input type="checkbox"/> Black No	N/A	No	No	No	N/A	No

Yellow

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

Blue None known.
 Black None known.
 Yellow None known.

SECTION 3: Composition/information on ingredients

3.1 Substances

Blue Mono-constituent substance
 Black Mono-constituent substance
 Yellow Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
<input checked="" type="checkbox"/> Blue Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	EC: 500-038-2 CAS: 25322-68-3	100	Not classified.	-	[1]
<input type="checkbox"/> Black Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	EC: 500-038-2 CAS: 25322-68-3	100	Not classified.	-	[1]
<input type="checkbox"/> Yellow 3,6,9,12-tetraoxatetradecane-1,14-diol	EC: 225-341-4 CAS: 4792-15-8	$\geq 25 - \leq 50$	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 See Section 16 for the full text of the H statements declared above.	-	[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

Polyethylene glycol standard, nominal Mw 238 g/mol [1] Constituent
 Polyethylene glycol standard, nominal Mw 600-1200000 g/mol [1] Constituent

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	:	Blue	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.
		Black	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.
		Yellow	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	:	Blue	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		Black	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		Yellow	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	:	Blue	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		Black	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		Yellow	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	:	Blue	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.
		Black	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.
		Yellow	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

SECTION 4: First aid measures

Protection of first-aiders	: <input checked="" type="checkbox"/> Blue Black Yellow	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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
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4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact	: <input checked="" type="checkbox"/> Blue Black Yellow	No known significant effects or critical hazards. No known significant effects or critical hazards. Causes serious eye irritation.
Inhalation	: <input checked="" type="checkbox"/> Blue Black Yellow	No known significant effects or critical hazards. No known significant effects or critical hazards. May cause respiratory irritation.
Skin contact	: <input checked="" type="checkbox"/> Blue Black Yellow	No known significant effects or critical hazards. No known significant effects or critical hazards. Causes skin irritation.
Ingestion	: <input checked="" type="checkbox"/> Blue Black Yellow	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	: <input checked="" type="checkbox"/> Blue Black Yellow	No specific data. No specific data. Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: <input checked="" type="checkbox"/> Blue Black Yellow	No specific data. No specific data. Adverse symptoms may include the following: respiratory tract irritation coughing
Skin contact	: <input checked="" type="checkbox"/> Blue Black Yellow	No specific data. No specific data. Adverse symptoms may include the following: irritation redness
Ingestion	: <input checked="" type="checkbox"/> Blue Black Yellow	No specific data. No specific data. No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: <input checked="" type="checkbox"/> Blue Black Yellow	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	: <input checked="" type="checkbox"/> Blue Black Yellow	No specific treatment. No specific treatment. No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: Blue	Use an extinguishing agent suitable for the surrounding fire.
	Black	Use an extinguishing agent suitable for the surrounding fire.
	Yellow	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: Blue	None known.
	Black	None known.
	Yellow	None known.

5.2 Special hazards arising from the substance or mixture



Hazards from the substance or mixture	: Blue	In a fire or if heated, a pressure increase will occur and the container may burst.
	Black	In a fire or if heated, a pressure increase will occur and the container may burst.
	Yellow	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion products	: Blue	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Black	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Yellow	Decomposition products may include the following materials: carbon dioxide carbon monoxide

5.3 Advice for firefighters


Special precautions for fire-fighters	: Blue	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.
	Black	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.
	Yellow	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	: Blue	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
	Black	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
	Yellow	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures


6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: 	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.
	Black	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.
	Yellow	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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: 	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".
	Black	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".
	Yellow	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".

6.2 Environmental precautions

: 	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).
Black	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).
Yellow	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



Methods for cleaning up	: 	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.
	Black	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.
	Yellow	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 6: Accidental release measures

6.4 Reference to other sections : 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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures	: 	Put on appropriate personal protective equipment (see Section 8).
	Black	Put on appropriate personal protective equipment (see Section 8).
	Yellow	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: 	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.
	Black	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.
	Yellow	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.

7.2 Conditions for safe storage, including any incompatibilities

Storage	: 	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.
	Black	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.
	Yellow	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 7: Handling and storage

Section 10) and food and drink. Store locked up. 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)

Recommendations	: <input checked="" type="checkbox"/> Blue	Industrial applications, Professional applications.
	Black	Industrial applications, Professional applications.
	Yellow	Industrial applications, Professional applications.
Industrial sector specific solutions	: <input checked="" type="checkbox"/> Blue	Not available.
	Black	Not available.
	Yellow	Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
Blue Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	DNEL	Long term Inhalation	7.14 mg/m ³	General population	Systemic
	DNEL	Long term Oral	40 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	40 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	40.2 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	112 mg/kg bw/day	Workers	Systemic
Black Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	DNEL	Long term Inhalation	7.14 mg/m ³	General population	Systemic
	DNEL	Long term Oral	40 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	40 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	40.2 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	112 mg/kg bw/day	Workers	Systemic

SECTION 8: Exposure controls/personal protection

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.

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

Physical state	: <input checked="" type="checkbox"/> Blue	Solid.
	Black	Solid.
	Yellow	Solid.
Colour	: <input checked="" type="checkbox"/> Blue	White.
	Black	White.
	Yellow	Not available.
Odour	: <input checked="" type="checkbox"/> Blue	Odourless.
	Black	Odourless.
	Yellow	Not available.
Odour threshold	: <input checked="" type="checkbox"/> Blue	Not available.
	Black	Not available.
	Yellow	Not available.
Melting point/freezing point	: <input checked="" type="checkbox"/> Blue	Not available.
	Black	Not available.
	Yellow	Not available.

SECTION 9: Physical and chemical properties

Initial boiling point and boiling range	: <input checked="" type="checkbox"/> Blue	250°C
	Black	250°C
	Yellow	Not available.
Flammability	: <input checked="" type="checkbox"/> Blue	Not applicable.
	Black	Not applicable.
	Yellow	Not applicable.
Upper/lower flammability or explosive limits	: <input checked="" type="checkbox"/> Blue	Not available.
	Black	Not available.
	Yellow	Not available.
Flash point	: <input checked="" type="checkbox"/> Blue	Closed cup: 171 to 235°C Open cup: 199 to 238°C
	Black	Closed cup: 171 to 235°C Open cup: 199 to 238°C
	Yellow	Not available.

Ingredient name	Closed cup		Open cup	
	°C	Method	°C	Method
<input checked="" type="checkbox"/> Yellow Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	171 to 235	-	199 to 238	-

Auto-ignition temperature	: <input checked="" type="checkbox"/> Blue	360°C
	Black	360°C

Ingredient name	°C	Method
<input checked="" type="checkbox"/> Yellow Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	360	-

Decomposition temperature	: <input checked="" type="checkbox"/> Blue	Not available.
	Black	Not available.
	Yellow	Not available.

pH	: <input checked="" type="checkbox"/> Blue	5 to 7
	Black	5.7
	Yellow	Not available.

Viscosity	: <input checked="" type="checkbox"/> Blue	Not available.
	Black	Not available.
	Yellow	Not available.

Solubility(ies)	Media	Result
<input checked="" type="checkbox"/> Blue	water	Soluble
	Black water	Soluble
	Yellow water	Soluble

Partition coefficient: n-octanol/water	: <input checked="" type="checkbox"/> Blue	Not available.
	Black	Not available.
	Yellow	Not applicable.

Vapour pressure	: <input checked="" type="checkbox"/> Blue	0.00000004 kPa (0.0000003 mm Hg)
	Black	0.00000004 kPa (0.0000003 mm Hg)

SECTION 9: Physical and chemical properties

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Yellow						
Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy-Ethane-1,2-diol, ethoxylated	0.0000003	0.00000004	-	-	-	-
3,6,9,12-tetraoxatetradecane-1,14-diol	0.000000232	0.000000031	-	-	-	-

Evaporation rate	: <input checked="" type="checkbox"/> Blue	Not available.
	: Black	Not available.
	: Yellow	Not available.
Relative density	: <input checked="" type="checkbox"/> Blue	1.13
	: Black	1.13
	: Yellow	Not available.
Vapour density	: <input checked="" type="checkbox"/> Blue	Not available.
	: Black	Not available.
	: Yellow	Not available.
Explosive properties	: <input checked="" type="checkbox"/> Blue	Not available.
	: Black	Not available.
	: Yellow	Not available.
Oxidising properties	: <input checked="" type="checkbox"/> Blue	Not available.
	: Black	Not available.
	: Yellow	Not available.
Particle characteristics		
Median particle size	: <input checked="" type="checkbox"/> Blue	Not applicable.
	: Black	Not applicable.
	: Yellow	Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: <input checked="" type="checkbox"/> Blue	No specific test data related to reactivity available for this product or its ingredients.
	: Black	No specific test data related to reactivity available for this product or its ingredients.
	: Yellow	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: <input checked="" type="checkbox"/> Blue	The product is stable.
	: Black	The product is stable.
	: Yellow	The product is stable.
10.3 Possibility of hazardous reactions	: <input checked="" type="checkbox"/> Blue	Under normal conditions of storage and use, hazardous reactions will not occur.
	: Black	Under normal conditions of storage and use, hazardous reactions will not occur.
	: Yellow	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: <input checked="" type="checkbox"/> Blue	No specific data.
	: Black	No specific data.
	: Yellow	No specific data.

SECTION 10: Stability and reactivity

10.5 Incompatible materials : Blue
 Black
 Yellow

May react or be incompatible with oxidising materials.
 May react or be incompatible with oxidising materials.
 May react or be incompatible with oxidising materials.

10.6 Hazardous decomposition products : Blue
 Black
 Yellow

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

Not available.

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"/> Blue Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	28000	N/A	N/A	N/A	N/A
Black Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	28000	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<input checked="" type="checkbox"/> Blue Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Black Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	Skin - Mild irritant	Rabbit	-	500 mg	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-

Sensitiser

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

SECTION 11: Toxicological information

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Yellow 3,6,9,12-tetraoxatetradecane-1,14-diol	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : Blue Not available.
 Black Not available.
 Yellow Not available.

Potential acute health effects

Inhalation : Blue No known significant effects or critical hazards.
 Black No known significant effects or critical hazards.
 Yellow May cause respiratory irritation.

Ingestion : Blue No known significant effects or critical hazards.
 Black No known significant effects or critical hazards.
 Yellow No known significant effects or critical hazards.

Skin contact : Blue No known significant effects or critical hazards.
 Black No known significant effects or critical hazards.
 Yellow Causes skin irritation.

Eye contact : Blue No known significant effects or critical hazards.
 Black No known significant effects or critical hazards.
 Yellow Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Blue No specific data.
 Black No specific data.
 Yellow Adverse symptoms may include the following:
 respiratory tract irritation
 coughing

Ingestion : Blue No specific data.
 Black No specific data.
 Yellow No specific data.

Skin contact : Blue No specific data.
 Black No specific data.
 Yellow Adverse symptoms may include the following:
 irritation
 redness

Eye contact : Blue No specific data.
 Black No specific data.
 Yellow Adverse symptoms may include the following:
 pain or irritation
 watering
 redness

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

SECTION 11: Toxicological information

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Not available.

General	Blue	No known significant effects or critical hazards.
	Black	No known significant effects or critical hazards.
	Yellow	No known significant effects or critical hazards.
Carcinogenicity	Blue	No known significant effects or critical hazards.
	Black	No known significant effects or critical hazards.
	Yellow	No known significant effects or critical hazards.
Mutagenicity	Blue	No known significant effects or critical hazards.
	Black	No known significant effects or critical hazards.
	Yellow	No known significant effects or critical hazards.
Reproductive toxicity	Blue	No known significant effects or critical hazards.
	Black	No known significant effects or critical hazards.
	Yellow	No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Blue Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	Acute EC50 >100 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 >1000000 μ g/l Fresh water	Fish - <i>Salmo salar</i> - Parr	96 hours
Black Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	Acute EC50 >100 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 >1000000 μ g/l Fresh water	Fish - <i>Salmo salar</i> - Parr	96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Blue Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	OECD 301D Ready Biodegradability - Closed Bottle Test	74.85 % - Readily - 28 days	4 mg/l	-
Black Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	OECD 301D Ready Biodegradability - Closed Bottle Test	74.85 % - Readily - 28 days	4 mg/l	-

SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Blue Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	-	-	Readily
Black Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Blue Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	-	3.2	Low
Black Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	-	3.2	Low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Blue Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	No	N/A	No	No	No	N/A	No
Black Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	No	N/A	No	No	No	N/A	No

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

SECTION 13: Disposal considerations

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 or ID 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

EU Regulation (EC) No. 1907/2006 (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.

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

SECTION 15: Regulatory information

Product / Ingredient name	Identifiers	Designation [Usage]
Yellow Yellow	-	3

Label : Blue Not applicable.
 Black Not applicable.
 Yellow Not applicable.

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : All components are listed or exempted.
Canada : All components are listed or exempted.
China : All components are listed or exempted.
Eurasian Economic Union : **Russian Federation inventory**: All components are listed or exempted.
Japan : **Japan inventory (CSCL)**: All components are listed or exempted.
Japan inventory (ISHL): All components are listed or exempted.
New Zealand : All components are listed or exempted.
Philippines : All components are listed or exempted.
Republic of Korea : All components are listed or exempted.
Taiwan : All components are listed or exempted.
Thailand : Not determined.
Turkey : Not determined.
United States : All components are active or exempted.
Viet Nam : All components are listed or exempted.

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

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

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Yellow Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	Calculation method Calculation method Calculation method

Full text of abbreviated H statements

Yellow H315 H319 H335	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
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Full text of classifications [CLP/GHS]

Yellow Eye Irrit. 2 Skin Irrit. 2 STOT SE 3	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
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