## SAFETY DATA SHEET



ReadyCal-Kit PEG, 3 x 10 Vials, 1.5ml, Part Number PSS-PEGKITR1

## Section 1. Identification

Product identifier	: ReadyCal-Kit PEG, 3 x 10 Vials, 1.5ml, Part Number PSS-PEGKITR1				
Part no. (chemical kit)	: PSS-PEGKITR1				
Part no.	: Øreen White Red	Not available. Not available. Not available.			
Relevant identified uses of	the substance or mixture and use	es advised against			
Identified uses	: Reagents and Standards for Analytical Chemistry Laboratory Use				
	Øreen White Red	10 vials, 1.5 ml 10 vials, 1.5 ml 10 vials, 1.5 ml			
Supplier/Manufacturer	: Agilent Technologies, Inc. 5301 Stevens Creek Blvd Santa Clara, CA 95051, USA 800-227-9770				
Emergency telephone number (with hours of operation)	: CHEMTREC®: 1-800-424-930	00			

## Section 2. Hazard identification

Classification of the substan	ice or mixture	
White		
H315 H319 H335	EYE IRRITAT	FION - Category 2 ION - Category 2A RGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract egory 3
<u>GHS label elements</u> Hazard pictograms	: ₩ hite	
Signal word	: <mark>Ø</mark> reen White Red	No signal word. Warning No signal word.
Hazard statements	: Øreen White	No known significant effects or critical hazards. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation.
Precautionary statements	Red	No known significant effects or critical hazards.
Prevention	: Øreen White	Not applicable. P280 - Wear protective gloves. Wear eye or face protection. P261 - Avoid breathing dust. P264 - Wash thoroughly after handling.
	Red	Not applicable.
Date of issue/Date of revision	: 04/30/2024	Date of previous issue: 07/09/2023Version: 21/16

## Section 2. Hazard identification

Response	: Creen	Not applicable.
	White	P304 + P312 - IF INHALED: Call a POISON
		CENTER or doctor if you feel unwell.
		P362 + P364 - Take off contaminated clothing and
		wash it before reuse.
		P302 + P352 - IF ON SKIN: Wash with plenty of
		water.
		P305 + P351 + P338 - IF IN EYES: Rinse cautiously
		with water for several minutes. Remove contact
		lenses, if present and easy to do. Continue rinsing.
		P337 + P313 - If eye irritation persists: Get medical
	<b>D</b> .	advice or attention.
	Red	Not applicable.
Storage	: Green	Not applicable.
	White	P403 + P233 - Store in a well-ventilated place. Keep
	<b>D</b> .	container tightly closed.
	Red	Not applicable.
Disposal	: <mark>Ø</mark> reen	Not applicable.
	White	P501 - Dispose of contents and container in
		accordance with all local, regional, national and
	Ded	international regulations.
	Red	Not applicable.
Supplemental label	: Øreen	None known.
elements	White	None known.
	Red	None known.
	M hite	Percentage of the mixture consisting of ingredient(s)
		of unknown hazards to the aquatic environment: 25%
	Red	Percentage of the mixture consisting of ingredient(s)
		of unknown hazards to the aquatic environment: 8%
Other hazards which do not	: Øreen	None known.
esult in classification	White	None known.
	Red	None known.

## Section 3. Composition/information on ingredients

Substance/mixture : Øre Whi Red	te Mixture		
Ingredient name	Synonyms	% (w/w)	CAS number
Green			
Poly(oxy-1,2-ethanediyl),α-hydro-ω- hydroxy- Ethane-1,2-diol, ethoxylated	Poly(oxy-1,2-ethanediyl),α-hydro-ω- hydroxy- Ethane-1,2-diol, ethoxylated	100	25322-68-3
White			
3,6,9,12-tetraoxatetradecane- 1,14-diol	3,6,9,12-tetraoxatetradecane- 1,14-diol	≥10 - ≤30	4792-15-8
Red			
3,6,9,12-tetraoxatetradecane- 1,14-diol	3,6,9,12-tetraoxatetradecane- 1,14-diol	≥1 - ≤5	4792-15-8

Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

## Section 3. Composition/information on ingredients

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

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

#### Section 4. First-aid measures Description of necessary first aid measures Eye contact : Green 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. White 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. Immediately flush eyes with plenty of water, Red occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. : Øreen Remove victim to fresh air and keep at rest in a Inhalation position comfortable for breathing. Get medical attention if symptoms occur. Remove victim to fresh air and keep at rest in a White 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 mouthto-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. Red Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. Skin contact : Creen Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. White 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. Red Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. : Creen Ingestion 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. White 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

### Section 4. First-aid measures

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.

Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important s	symptoms/effects,	acute and d	<u>lelayed</u>

Red

Potential acute healt	<u>h effects</u>	
Eye contact	: Øreen White Red	No known significant effects or critical hazards. Causes serious eye irritation. No known significant effects or critical hazards.
Inhalation	: Øreen White Red	No known significant effects or critical hazards. May cause respiratory irritation. No known significant effects or critical hazards.
Skin contact	: Øreen White Red	No known significant effects or critical hazards. Causes skin irritation. No known significant effects or critical hazards.
Ingestion	: Øreen White Red	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Over-exposure signs	<u>s/symptoms</u>	
Eye contact	: Green White Red	No specific data. Adverse symptoms may include the following: pain or irritation watering redness No specific data.
Inhalation	: Øreen White Red	No specific data. Adverse symptoms may include the following: respiratory tract irritation coughing No specific data.
Skin contact	: Øreen White Red	No specific data. Adverse symptoms may include the following: irritation redness No specific data.
Ingestion	: Øreen White Red	No specific data. No specific data. No specific data.

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



## Section 4. First-aid measures

Notes to physician	: <mark>Ø</mark> reen	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	White	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Red	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: Øreen White Red	No specific treatment. No specific treatment. No specific treatment.
Protection of first-aiders	: Green White	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.
	Red	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures			
Extinguishing media			
Suitable extinguishing media	: Green	Use an extinguishing agent suitable for the surrounding fire.	
	White	Use an extinguishing agent suitable for the surrounding fire.	
	Red	Use an extinguishing agent suitable for the surrounding fire.	
Unsuitable extinguishing	: Øreen	None known.	
media	White	None known.	
	Red	None known.	
Specific hazards arising	: Green	No specific fire or explosion hazard.	
from the chemical	White	No specific fire or explosion hazard.	
	Red	No specific fire or explosion hazard.	
Hazardous thermal decomposition products	: Øreen	Decomposition products may include the following materials: carbon dioxide carbon monoxide	
	White	Decomposition products may include the following materials: carbon dioxide carbon monoxide	
	Red	Decomposition products may include the following materials: carbon dioxide carbon monoxide	

## Section 5. Fire-fighting measures

-	-	
Special protective actions for fire-fighters	: <mark>Ø</mark> reen	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.
	White	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.
	Red	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	: <mark>Ø</mark> reen	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	White	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Red	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

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

For non-emergency personnel	<b>B</b> reen	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.
	White	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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	Red	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	: <mark>Ø</mark> reen	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".
	White	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".
	Red	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".
Date of issue/Date of revision	: 04/30/2024	Date of previous issue : 07/09/2023 Version : 2 6/16

### Section 6. Accidental release measures

Environmental precautions	Green	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).
	White	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).
	Red	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Methods and materials for con	tainment and cleaning up	
Methods for cleaning up	Green	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
	White	Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
	Red	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

	U	5
Precautions for safe hand	ling	
Protective measures	: Green	Put on appropriate personal protective equipment (see Section 8).
	White	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. 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.
	Red	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	: <mark>Ø</mark> reen	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.
	White	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

## Section 7. Handling and storage

Rec	d	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.
Conditions for safe storage, : Gre including any incompatibilities		Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for
Wh	ite	incompatible materials before handling or use. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for
Rec	d	incompatible materials before handling or use. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

#### Control parameters

#### **Occupational exposure limits**

Ingredient name	Exposure limits
<b>Green</b> Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	OARS WEEL (United States, 4/2022). TWA: 10 mg/m <sup>3</sup> 8 hours.

#### **Biological exposure indices**

No exposure indices known.

## Section 8. Exposure controls/personal protection

•	· ·
Appropriate engineering controls	: Sood 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 measu	<u>Ires</u>
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	<ul> <li>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.</li> </ul>
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

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

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

<u>Appearance</u>		
Physical state	: Øreen White Red	Solid. Solid. Solid.
Color	: Øreen White Red	White. Not available. Not available.
Odor	: Øreen White Red	Odorless. Not available. Not available.
Odor threshold	: Øreen White Red	Not available. Not available. Not available.
рН	: Green White Red	5 to 7 Not available. Not available.

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

Melting point/freezing point								
	1	Green		Not avail				
		White Red		Not avail Not avail				
Poiling point initial bailing		Green						
Boiling point, initial boiling point, and boiling range		White		250°C (4 Not avail				
point, and boining range		Red		Not avail				
Flash point		Green			up: 171 to 2	35°C (33	9.8 to 455	ΰ°F)
					p: 199 to 238			
		White		Not appli				
		Red		Not appli	cable.			
				Closed of	cup		Open	cup
		Ingredient name	°C	°F	Method	°C	°F	Method
		Red						
		3,6,9-trioxaundecane-	176	348.8		182	359.6	
		1,11-diol	170	340.0	-	102	359.0	-
Evaporation rate	•	Green		Not avail	able	_		
	1	White		Not avail				
		Red		Not avail	able.			
Flammability	1	Øreen		Not avail	able.			
		White		Not avail				
		Red		Not avail	able.			
Lower and upper explosion	1	Green		Not appli				
limit/flammability limit		White		Not appli				
		Red		Not appli		000000		
Vapor pressure	-	Breen         0.00000004 kPa (0.0000003 mm Hg)						
			Vapo	r Pressui	re at 20°C	Var	or press	ure at 50°C
		Ingredient name	mm Hg	kPa	Method	mm	kPa	Method
		Ingredient name		1	1	-	-	1
		Ingredient name		1	1	mm	-	1
			mm Hg	kPa	Method	mm	-	1
		White	mm Hg	kPa	Method	mm	-	1
		White 3,6,9,12-tetraoxatetradecane-	mm Hg	kPa	Method	mm	-	1
		White 3,6,9,12-tetraoxatetradecane- 1,14-diol	mm Hg	kPa	Method	mm	-	1
		White 3,6,9,12-tetraoxatetradecane-	mm Hg	kPa	Method	mm	-	1
		White 3,6,9,12-tetraoxatetradecane- 1,14-diol Red 3,6,9,12-tetraoxatetradecane-	mm Hg	kPa 0.000000031	Method -	mm	-	1
		White 3,6,9,12-tetraoxatetradecane- 1,14-diol Red	mm Hg	kPa 0.000000031	Method -	mm	-	1
Relative vapor density	:	White 3,6,9,12-tetraoxatetradecane- 1,14-diol Red 3,6,9,12-tetraoxatetradecane- 1,14-diol Øreen	mm Hg	kPa 0.000000031 0.000000031 Not appli	Method - - cable.	mm	-	1
Relative vapor density	:	White 3,6,9,12-tetraoxatetradecane- 1,14-diol Red 3,6,9,12-tetraoxatetradecane- 1,14-diol Green White	mm Hg	kPa 0.000000031 0.000000031 Not appli Not appli	Method - - cable. cable.	mm	-	1
		White 3,6,9,12-tetraoxatetradecane- 1,14-diol Red 3,6,9,12-tetraoxatetradecane- 1,14-diol Øreen White Red	mm Hg	kPa 0.000000031 0.000000031 Not appli Not appli Not appli	Method - - cable. cable.	mm	-	1
Relative vapor density Relative density		White 3,6,9,12-tetraoxatetradecane- 1,14-diol Red 3,6,9,12-tetraoxatetradecane- 1,14-diol Green White Red Green	mm Hg	kPa 0.000000031 0.000000031 Not appli Not appli 1.13	- - cable. cable. cable.	mm	-	1
		White 3,6,9,12-tetraoxatetradecane- 1,14-diol Red 3,6,9,12-tetraoxatetradecane- 1,14-diol Øreen White Red Øreen White	mm Hg	kPa 0.000000031 0.000000031 Not appli Not appli 1.13 Not avail	Method - - cable. cable. cable. able.	mm	-	1
Relative density		White 3,6,9,12-tetraoxatetradecane- 1,14-diol Red 3,6,9,12-tetraoxatetradecane- 1,14-diol Green White Red Green White Red	mm Hg	kPa 0.000000031 0.000000031 Not appli Not appli 1.13	Method - cable. cable. cable. able. able.	mm	-	1
		White 3,6,9,12-tetraoxatetradecane- 1,14-diol Red 3,6,9,12-tetraoxatetradecane- 1,14-diol Øreen White Red Øreen White Red Media	mm Hg	kPa 0.000000031 0.000000031 Not appli Not appli 1.13 Not avail	Method - - cable. cable. cable. able.	mm	-	1
Relative density		White 3,6,9,12-tetraoxatetradecane- 1,14-diol Red 3,6,9,12-tetraoxatetradecane- 1,14-diol Øreen White Red Øreen White Red Øreen White Red Øreen White Red Øreen White Red Øreen White Red	mm Hg	kPa 0.000000031 0.000000031 Not appli Not appli 1.13 Not avail	Method - cable. cable. cable. able. able. Result	mm	-	1
Relative density		White 3,6,9,12-tetraoxatetradecane- 1,14-diol Red 3,6,9,12-tetraoxatetradecane- 1,14-diol Øreen White Red Øreen White Red Øreen White Red Øreen White Red Øreen White Red Øreen White Red Øreen White Red Øreen White Red Øreen White Red Øreen White Red Øreen White Red Øreen White Red Øreen White Red	mm Hg	kPa 0.000000031 0.000000031 Not appli Not appli 1.13 Not avail	Method - cable. cable. cable. able. able.	mm	-	1
Relative density		White 3,6,9,12-tetraoxatetradecane- 1,14-diol Red 3,6,9,12-tetraoxatetradecane- 1,14-diol Øreen White Red Øreen White Red Øreen White Red Øreen White Red Øreen White Red Øreen White Red	mm Hg	kPa 0.000000031 0.000000031 Not appli Not appli 1.13 Not avail	Method - cable. cable. cable. able. able. Result	mm	-	1
Relative density		White 3,6,9,12-tetraoxatetradecane- 1,14-diol Red 3,6,9,12-tetraoxatetradecane- 1,14-diol Green White Red Green White Red Media Green water White	mm Hg	kPa 0.000000031 0.000000031 Not appli Not appli 1.13 Not avail	Method - cable. cable. cable. able. able. able. Soluble Soluble	mm	-	1
Relative density		White 3,6,9,12-tetraoxatetradecane- 1,14-diol Red 3,6,9,12-tetraoxatetradecane- 1,14-diol Green White Red Green White Red Media Green water White water White water	mm Hg	kPa 0.000000031 0.000000031 Not appli Not appli 1.13 Not avail	Method - - cable. cable. cable. able. able. Boluble	mm	-	1

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

Partition coefficient: n-	1	•	Not available.		
octanol/water			Not applicable		
		Red N	Not applicable		
Auto-ignition temperature	1	Øreen 3	360°C (680°F)		
		White N	Not applicable	-	
		Red 1	Not applicable	-	
		Ingredient name	°C	°F	Method
		Red			
		3,6,9-trioxaundecane-1,11-diol	349	660.2	-
<b>Decomposition temperature</b>	:	Øreen N	Not available.		
			Not available.		
		Red N	Not available.		
Viscosity	1	Øreen N	Not applicable		
			Not applicable		
		Red N	Not applicable		
Particle characteristics					
Median particle size	:	Øreen N	Not available.		
-		White	Not available.		
		Red	Not available.		

## Section 10. Stability and reactivity

Reactivity	: Øreen	No specific test data related to reactivity available for this product or its ingredients.
	White	No specific test data related to reactivity available for this product or its ingredients.
	Red	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: <mark>Ø</mark> reen	The product is stable.
	White	The product is stable.
	Red	The product is stable.
Possibility of hazardous reactions	: Green	Under normal conditions of storage and use, hazardous reactions will not occur.
	White	Under normal conditions of storage and use, hazardous reactions will not occur.
	Red	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Øreen	No specific data.
	White	No specific data.
	Red	No specific data.
Incompatible materials	: Øreen	May react or be incompatible with oxidizing materials.
	White	May react or be incompatible with oxidizing materials.
	Red	May react or be incompatible with oxidizing materials.

## Section 10. Stability and reactivity

Hazardous decomposition : Øreen products

White

Red

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

#### Information on toxicological effects

#### Acute toxicity

Not available.

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>Green</b> 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 Skin - Mild irritant Skin - Mild irritant	Rabbit Rabbit Rabbit	- -	500 mg 24 hours 500 mg 500 mg	- - -

#### **Sensitization**

Not available.

<u>Mutagenicity</u>	
<b>Conclusion/Summary</b>	: Not available.
Carcinogenicity	
<b>Conclusion/Summary</b>	: Not available.
Reproductive toxicity	
<b>Conclusion/Summary</b>	: Not available.
Teratogenicity	
<b>Conclusion/Summary</b>	: Not available.

#### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
White 3,6,9,12-tetraoxatetradecane-1,14-diol	Category 3	-	Respiratory tract irritation
<b>Red</b> 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.

#### 4: 4: A A .... £ 0 -. . .

Information on the likely routes of exposure	: Øreen White	Not available. Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
	Red	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Potential acute health effect	<u>:ts</u>	
Eye contact	: <mark>Ø</mark> reen White Red	No known significant effects or critical hazards. Causes serious eye irritation. No known significant effects or critical hazards.
Inhalation	: <mark>Ø</mark> reen White Red	No known significant effects or critical hazards. May cause respiratory irritation. No known significant effects or critical hazards.
Skin contact	: <mark>Ø</mark> reen White Red	No known significant effects or critical hazards. Causes skin irritation. No known significant effects or critical hazards.
Ingestion	: <mark>Ø</mark> reen White Red	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 pl	nysical, chemical and to	exicological characteristics
Eye contact	: Øreen White	No specific data. Adverse symptoms may include the following: pain or irritation watering redness
	Red	No specific data.
Inhalation	: Øreen White Red	No specific data. Adverse symptoms may include the following: respiratory tract irritation coughing No specific data.
Skin contact	: Green White Red	No specific data. Adverse symptoms may include the following: irritation redness No specific data.
Ingestion	: <mark>Ø</mark> reen White Red	No specific data. No specific data. No specific data.
	ects and also chronic ef	ffects 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 offects	Not available	

**Potential delayed effects** : Not available.

Potential chronic health effects

General	: <mark>Ø</mark> reen
	White
	Red

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

	_	
Carcinogenicity	: Øreen White Red	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: Øreen White Red	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Reproductive toxicity	: Øreen White Red	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

#### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
<b>Green</b> Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	28000	N/A	N/A	N/A	N/A

## Section 12. Ecological information

#### **Toxicity**

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

#### Persistence and degradability

Product/ingredient name	Test	Result		Dose	Inoculum
<b>Green</b> 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	-
Product/ingredient name	Aquatic half-life		Photolysi	S	Biodegradability
<b>Green</b> Poly(oxy-1,2-ethanediyl),α- hydro-ω-hydroxy- Ethane- 1,2-diol, ethoxylated	-		-		Readily

#### **Bioaccumulative potential**

## Section 12. Ecological information

Product/ingredient name	LogPow	BCF	Potential
<b>Green</b> Poly(oxy-1,2-ethanediyl),α- hydro-ω-hydroxy- Ethane- 1,2-diol, ethoxylated	-	3.2	Low

# Mobility in soilSoil/water partition: Not available.coefficient (Koc)

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

### Section 13. Disposal considerations

Disposal methods	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain
	some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

TDG / IMDG / IATA	: Not regulated

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to IMO instruments

## Section 15. Regulatory information

#### Canadian lists Canadian NPRI

: None of the components are listed.

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

#### International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC) Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

### Section 15. Regulatory information

Not listed.

#### Inventory list

Canada	: Not determined.
United States	: Not determined.

## Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 04/30/2024
Date of previous issue	: 07/09/2023
Version	: 2
Key to abbreviations	<ul> <li>ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals HPR = Hazardous Products Regulations IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available UN = United Nations</li> </ul>

#### Procedure used to derive the classification

Classification	Justification
White SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method Calculation method Calculation method

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.