

SAFETY DATA SHEET



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

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

1.1 Product identifier

Product name	: ReadyCal-Kit PEG, 3 x 10 Vials, 1.5ml, Part Number PSS-PEGKITR1	
CAS number	: <input checked="" type="checkbox"/> Green	25322-68-3
	: White	Not applicable.
	: Red	Not applicable.
Part no. (chemical kit)	: PSS-PEGKITR1	
Part no.	: <input checked="" type="checkbox"/> Green	Not available.
	: White	Not available.
	: Red	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"/> Green	10 vials, 1.5 ml
	: White	10 vials, 1.5 ml
	: Red	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"/> Green	Mono-constituent substance
	: White	Mixture
	: Red	Mixture

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

White

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

Green

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

White

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Red

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

SECTION 2: Hazards identification

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Green Not applicable.
 White Not applicable.
 Red Not applicable.

Special packaging requirements

Tactile warning of danger : Green Not applicable.
 White Not applicable.
 Red 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"/> Green No	N/A	No	No	No	N/A	No

White This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
 Red 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 : Green None known.
 White None known.
 Red None known.

SECTION 3: Composition/information on ingredients

3.1 Substances : Green Mono-constituent substance
 White Mixture
 Red Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
<input checked="" type="checkbox"/> Green 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]
White 3,6,9,12-tetraoxatetradecane-1,14-diol	EC: 225-341-4 CAS: 4792-15-8	≥ 25 - ≤ 50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	-	[1]
Red 3,6,9,12-tetraoxatetradecane-1,14-diol	EC: 225-341-4 CAS: 4792-15-8	≤ 5	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

SECTION 3: Composition/information on ingredients

Green	[1] Constituent
White	[1] Substance classified with a health or environmental hazard
Red	[1] Substance classified with a health or environmental hazard

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

SECTION 4: First aid measures

4.1 Description of 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.
		Red	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.
Inhalation	:	Green	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		White	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.
		Red	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	:	Green	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		White	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.
		Red	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	:	Green	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 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

	Red	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.
Protection of first-aiders :	Green	No action shall be taken involving any personal risk or without suitable training.
	White	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.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact	Green	No known significant effects or critical hazards.
	White	Causes serious eye irritation.
	Red	No known significant effects or critical hazards.
Inhalation	Green	No known significant effects or critical hazards.
	White	May cause respiratory irritation.
	Red	No known significant effects or critical hazards.
Skin contact	Green	No known significant effects or critical hazards.
	White	Causes skin irritation.
	Red	No known significant effects or critical hazards.
Ingestion	Green	No known significant effects or critical hazards.
	White	No known significant effects or critical hazards.
	Red	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	Green	No specific data.
	White	Adverse symptoms may include the following: pain or irritation watering redness
	Red	No specific data.
Inhalation	Green	No specific data.
	White	Adverse symptoms may include the following: respiratory tract irritation coughing
	Red	No specific data.
Skin contact	Green	No specific data.
	White	Adverse symptoms may include the following: irritation redness
	Red	No specific data.
Ingestion	Green	No specific data.
	White	No specific data.
	Red	No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	Green	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.

SECTION 4: First aid measures

Specific treatments	: <input checked="" type="checkbox"/> Green White Red	No specific treatment. No specific treatment. No specific treatment.
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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: <input checked="" type="checkbox"/> Green White Red	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.
Unsuitable extinguishing media	: <input checked="" type="checkbox"/> Green White Red	None known. None known. None known.

5.2 Special hazards arising from the substance or mixture



Hazards from the substance or mixture	: <input checked="" type="checkbox"/> Green White Red	No specific fire or explosion hazard. No specific fire or explosion hazard. No specific fire or explosion hazard.
Hazardous combustion products	: <input checked="" type="checkbox"/> Green White Red	Decomposition products may include the following materials: carbon dioxide carbon monoxide Decomposition products may include the following materials: carbon dioxide carbon monoxide Decomposition products may include the following materials: carbon dioxide carbon monoxide

5.3 Advice for firefighters


Special precautions for fire-fighters	: <input checked="" type="checkbox"/> Green White 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. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: <input checked="" type="checkbox"/> Green White Red	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. 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. 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	:  Green	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.
	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 spilt 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 spilt material. Put on appropriate personal protective equipment.
For emergency responders	:  Green	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".
	White	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".
	Red	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

:  Green	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).
White	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).
Red	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	:  Green	Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled 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, labelled waste container. Dispose of via a licensed waste disposal contractor.

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	:	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	:	Green	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 contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
		Red	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	:	Green	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.
		White	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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
		Red	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

SECTION 7: Handling and storage

before handling or use.

7.3 Specific end use(s)

Recommendations	: <input checked="" type="checkbox"/> Green	Industrial applications, Professional applications.
	White	Industrial applications, Professional applications.
	Red	Industrial applications, Professional applications.
Industrial sector specific solutions	: <input checked="" type="checkbox"/> Green	Not available.
	White	Not available.
	Red	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
<input checked="" type="checkbox"/> Green 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

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.

SECTION 8: Exposure controls/personal protection

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	:	☑ Green White Red	Solid. Solid. Solid.
Colour	:	☑ Green White Red	White. Not available. Not available.
Odour	:	☑ Green White Red	Odourless. Not available. Not available.
Odour threshold	:	☑ Green White Red	Not available. Not available. Not available.
Melting point/freezing point	:	☑ Green White Red	Not available. Not available. Not available.
Initial boiling point and boiling range	:	☑ Green White Red	250°C Not available. Not available.
Flammability	:	☑ Green White Red	Not available. Not available. Not available.
Upper/lower flammability or explosive limits	:	☑ Green White Red	Not applicable. Not applicable. Not applicable.
Flash point	:	☑ Green White Red	Closed cup: 171 to 235°C Open cup: 199 to 238°C Not applicable. Not applicable.

SECTION 9: Physical and chemical properties

Auto-ignition temperature	: <input checked="" type="checkbox"/> Green White Red	360°C Not applicable. Not applicable.								
Decomposition temperature	: <input checked="" type="checkbox"/> Green White Red	Not available. Not available. Not available.								
pH	: <input checked="" type="checkbox"/> Green White Red	5 to 7 Not available. Not available.								
Viscosity	: <input checked="" type="checkbox"/> Green White Red	Not applicable. Not applicable. Not applicable.								
Solubility(ies)	: <table border="1"> <thead> <tr> <th>Media</th> <th>Result</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/> Green water</td> <td>Soluble</td> </tr> <tr> <td>White water</td> <td>Soluble</td> </tr> <tr> <td>Red water</td> <td>Soluble</td> </tr> </tbody> </table>	Media	Result	<input checked="" type="checkbox"/> Green water	Soluble	White water	Soluble	Red water	Soluble	
Media	Result									
<input checked="" type="checkbox"/> Green water	Soluble									
White water	Soluble									
Red water	Soluble									
Partition coefficient: n-octanol/water	: <input checked="" type="checkbox"/> Green White Red	Not available. Not applicable. Not applicable.								
Vapour pressure	: <input checked="" type="checkbox"/> Green	0.00000004 kPa (0.0000003 mm Hg)								
Evaporation rate	: <input checked="" type="checkbox"/> Green White Red	Not available. Not available. Not available.								
Relative density	: <input checked="" type="checkbox"/> Green White Red	1.13 Not available. Not available.								
Vapour density	: <input checked="" type="checkbox"/> Green White Red	Not applicable. Not applicable. Not applicable.								
Explosive properties	: <input checked="" type="checkbox"/> Green White Red	Not available. Not available. Not available.								
Oxidising properties	: <input checked="" type="checkbox"/> Green White Red	Not available. Not available. Not available.								
Particle characteristics										
Median particle size	: <input checked="" type="checkbox"/> Green White Red	Not available. Not available. Not available.								

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: <input checked="" type="checkbox"/> Green White Red	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.
10.2 Chemical stability	: <input checked="" type="checkbox"/> Green White Red	The product is stable. The product is stable. The product is stable.

SECTION 10: Stability and reactivity

10.3 Possibility of hazardous reactions	: <input checked="" type="checkbox"/> 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.
10.4 Conditions to avoid	: <input checked="" type="checkbox"/> Green	No specific data.
	White	No specific data.
	Red	No specific data.
10.5 Incompatible materials	: <input checked="" type="checkbox"/> Green	May react or be incompatible with oxidising materials.
	White	May react or be incompatible with oxidising materials.
	Red	May react or be incompatible with oxidising materials.
10.6 Hazardous decomposition products	: <input checked="" type="checkbox"/> Green	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	White	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Red	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"/> Green 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"/> Green 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	-
	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.

Teratogenicity

Conclusion/Summary : Not available.

SECTION 11: Toxicological information

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
White 3,6,9,12-tetraoxatetradecane-1,14-diol	Category 3	-	Respiratory tract irritation
Red 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 : Green Not available.
 White Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
 Red Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Inhalation : Green No known significant effects or critical hazards.
 White May cause respiratory irritation.
 Red No known significant effects or critical hazards.

Ingestion : Green No known significant effects or critical hazards.
 White No known significant effects or critical hazards.
 Red No known significant effects or critical hazards.

Skin contact : Green No known significant effects or critical hazards.
 White Causes skin irritation.
 Red No known significant effects or critical hazards.

Eye contact : Green No known significant effects or critical hazards.
 White Causes serious eye irritation.
 Red No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Green No specific data.
 White Adverse symptoms may include the following:
 respiratory tract irritation
 coughing
 Red No specific data.

Ingestion : Green No specific data.
 White No specific data.
 Red No specific data.

Skin contact : Green No specific data.
 White Adverse symptoms may include the following:
 irritation
 redness
 Red No specific data.

Eye contact : Green No specific data.
 White Adverse symptoms may include the following:
 pain or irritation
 watering
 redness
 Red 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.

SECTION 11: Toxicological information

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Not available.

General : Green No known significant effects or critical hazards.
 White No known significant effects or critical hazards.
 Red No known significant effects or critical hazards.

Carcinogenicity : Green No known significant effects or critical hazards.
 White No known significant effects or critical hazards.
 Red No known significant effects or critical hazards.

Mutagenicity : Green No known significant effects or critical hazards.
 White No known significant effects or critical hazards.
 Red No known significant effects or critical hazards.

Reproductive toxicity : Green No known significant effects or critical hazards.
 White No known significant effects or critical hazards.
 Red 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
<input checked="" type="checkbox"/> Green 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
<input checked="" type="checkbox"/> Green 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	Photolysis	Biodegradability
<input checked="" type="checkbox"/> Green Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy- Ethane-1,2-diol, ethoxylated	-	-	Readily

12.3 Bioaccumulative potential

SECTION 12: Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
Green 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
Green 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

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	-	-	-

SECTION 14: Transport information

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

No listed substance

Label : Green Not applicable.
 White Not applicable.
 Red 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.

SECTION 15: Regulatory information

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	: <input checked="" type="checkbox"/> Not determined.
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	: <input checked="" type="checkbox"/> Not determined.
Taiwan	: All components are listed or exempted.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: <input checked="" type="checkbox"/> Not determined.
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
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Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
<input checked="" type="checkbox"/> White Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	Calculation method Calculation method Calculation method

Full text of abbreviated H statements

<input checked="" type="checkbox"/> White H315 H319 H335	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
Red H315 H319 H335	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

SECTION 16: Other information

[Full text of classifications \[CLP/GHS\]](#)

White 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
Red 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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