SAFETY DATA SHEET

SIEMENS : Healthineers :

Rapidpoint 405 Measurement Cartridge BG+COox

SDS no.: 130520

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

1.1 Product identifier

Product name : Rapidpoint 405 Measurement Cartridge BG+COox

Product code : 130520; 130521; 05768789; 07846760; 10323175; 10327073; 10283221

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

Identified uses Inner Fill Solution Diagnostic agents.

RCX Reagent Diagnostic agents.
200 Cal Reagent Diagnostic agents.
Zero Cal Diagnostic agents.

Restrictions on use For professional users only.

Supplier : Siemens Healthcare Diagnostics Limited

Park View, Watchmoor Park, Camberley, Surrey, GU15 3YL United Kingdom

Phone: +44 (0) 345 600 1955

e-mail address of person responsible for this SDS

: dx.msds.healthcare@siemens-healthineers.com

1.4 Emergency telephone number

CHEMTREC: +44 20 3807 3798

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Inner Fill Solution Mixture

RCX Reagent Mixture
200 Cal Reagent Mixture
Zero Cal Mixture

Classification according to UK CLP/GHS

Inner Fill Solution Aquatic Chronic 3, H412

RCX Reagent

Skin Sens. 1, H317

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

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 :



SECTION 2: Hazards identification

Signal word : Inner Fill Solution No signal word.

RCX Reagent Warning 200 Cal Reagent No signal word. Zero Cal No signal word.

Hazard statements : Inner Fill Solution H412 - Harmful to aquatic life with long

lasting effects.

H317 - May cause an allergic skin **RCX** Reagent

reaction.

200 Cal Reagent No known significant effects or critical

hazards.

Zero Cal No known significant effects or critical

hazards.

Precautionary statements

Prevention : Inner Fill Solution P273 - Avoid release to the environment.

> P280 - Wear protective gloves/protective **RCX** Reagent

clothing/eve protection/face protection.

Not applicable. 200 Cal Reagent Zero Cal Not applicable.

Response : Inner Fill Solution Not applicable.

> **RCX** Reagent P302 + P352 - IF ON SKIN: Wash with

> > plenty of soap and water.

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention. P362 + P364 - Take off contaminated

clothing and wash it before reuse.

200 Cal Reagent Not applicable. Zero Cal Not applicable.

: Inner Fill Solution Storage Not applicable.

RCX Reagent Not applicable. 200 Cal Reagent Not applicable. Zero Cal Not applicable.

Disposal : Inner Fill Solution P501 - Dispose of contents and

> container in accordance with all local, regional, national and international

regulations.

RCX Reagent Not applicable. 200 Cal Reagent Not applicable. Not applicable. Zero Cal Not applicable.

Supplemental label : Inner Fill Solution Not applicable. elements RCX Reagent

Zero Cal

Contains reaction mass of: 5-chloro-200 Cal Reagent

2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May

produce an allergic reaction.

Safety data sheet available on request.

Not applicable.

: Inner Fill Solution Not applicable. **RCX** Reagent Not applicable. 200 Cal Reagent Not applicable. Zero Cal Not applicable.

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

articles

2.3 Other hazards

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

SECTION 2: Hazards identification

Inner Fill Solution This mixture does not contain any

substances that are assessed to be a

PBT or a vPvB.

RCX Reagent This mixture does not contain any

substances that are assessed to be a

PBT or a vPvB.

200 Cal Reagent This mixture does not contain any

substances that are assessed to be a

PBT or a vPvB.

Zero Cal 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 : Inner Fill Solution **RCX** Reagent 200 Cal Reagent Zero Cal

None known. None known. None known. None known.

Additional information

Not available.

: Not available.

SECTION 3: Composition/information on ingredients

3.1 Substances : Inner Fill Solution Mixture

RCX Reagent Mixture 200 Cal Reagent Mixture Zero Cal Mixture

Product/ingredient name	Identifiers	%	Classification	Туре
Inner Fill Solution				
silver chloride	EC: 232-033-3 CAS: 7783-90-6	<0.025	Aquatic Acute 1, H400 (M=1000) Aquatic Chronic 1, H410 (M=100)	[1] [2]
RCX Reagent				
3(2H)-Isothiazolone, 2-methyl-	EC: 220-239-6 CAS: 2682-20-4	<0.1	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1) EUH071	[1]
sodium hydroxide	EC: 215-185-5 CAS: 1310-73-2 Index: 011-002-00-6	≤0.1	Skin Corr. 1A, H314 Eye Dam. 1, H318 See Section 16 for	[1] [2]
			the full text of the H statements declared above.	

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact: Inner Fill Solution 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.

RCX Reagent 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 if irritation occurs.

200 Cal Reagent 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.

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 : Inner Fill Solution Remove victim to fresh air and keep at

Zero Cal

rest in a position comfortable for

breathing.

RCX Reagent Remove victim to fresh air and keep at

rest in a position comfortable for breathing. 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 adverse health effects persist or are severe. 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.

200 Cal Reagent Remove victim to fresh air and keep at

rest in a position comfortable for breathing. Get medical attention if

symptoms occur.

Zero Cal Remove victim to fresh air and keep at

rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact: Inner Fill Solution Flush contaminated skin with plenty of

water. Remove contaminated clothing and shoes. Get medical attention if

symptoms occur.

RCX Reagent Wash with plenty of soap and water.

Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention.

In the event of any complaints or

200 Cal Reagent

Zero Cal

RCX Reagent

Rapidpoint 405 Measurement Cartridge BG+COox

SECTION 4: First aid measures

symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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. Remove contaminated clothing and shoes. Get medical attention if

symptoms occur.

Ingestion: Inner Fill Solution

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.

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

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

unconscious person. If unconscious, place in recovery position and get

attention if symptoms occur.

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 : Inner Fill Solution

RCX Reagent

Zero Cal

200 Cal Reagent

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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before

removing it, or wear gloves.

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.

200 Cal Reagent

Zero Cal

SECTION 4: First aid measures

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact: Inner Fill Solution No specific data.

RCX Reagent

200 Cal Reagent

Zero Cal

No specific data.

No specific data.

No specific data.

No specific data.

Inhalation: Inner Fill Solution No specific data.

RCX Reagent No specific data.

200 Cal Reagent No specific data.

Zero Cal No specific data.

Inner Fill Solution No specific data.

Skin contact: Inner Fill SolutionNo specific data.RCX ReagentAdverse symptoms may include the

following: irritation

redness

200 Cal Reagent No specific data.
Zero Cal No specific data.
Ingestion : Inner Fill Solution No specific data.
RCX Reagent No specific data.

200 Cal Reagent No specific data.

Zero Cal No specific data.

No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

RCX Reagent

Notes to physician : Inner Fill Solution 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.

200 Cal Reagent Treat symptomatically. Contact poison

treatment specialist immediately if large quantities have been ingested or inhaled.

Zero Cal In case of inhalation of decomposition

products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for

48 hours.

Specific treatments: Inner Fill Solution No specific treatment.

RCX Reagent No specific treatment.

200 Cal Reagent No specific treatment.

Zero Cal No specific treatment.

Inner Fill Solution Not available.
RCX Reagent Not available.
200 Cal Reagent Not available.
Zero Cal Not available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing

media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

: None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

: In a fire or if heated, a pressure increase will occur and the container may burst.

SECTION 5: Firefighting measures

Hazardous combustion products

: No specific data.

5.3 Advice for firefighters

Special protective actions for fire-fighters

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

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. 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".

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).

6.3 Methods and material for containment and cleaning up

Small spill

: 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.

Large spill

: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. 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.

SECTION 7: Handling and storage

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.

7.2 Conditions for safe storage, 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 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 : Not available.

Industrial sector specific : Not available.

solutions

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Inner Fill Solution	
silver chloride	EH40/2005 WELs (United Kingdom (UK), 1/2020). [silver (soluble compounds)] TWA: 0.01 mg/m³, (as Ag) 8 hours.
RCX Reagent sodium hydroxide	EH40/2005 WELs (United Kingdom (UK), 1/2020). STEL: 2 mg/m³ 15 minutes.

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
Inner Fill Solution					
silver chloride	DNEL	Long term Inhalation	0.053 mg/ m³	General population	Systemic
	DNEL	Long term Inhalation	0.13 mg/m ³		Systemic
	DNEL	Long term Oral	1.59 mg/ kg bw/day	General population	Systemic
RCX Reagent					
3(2H)-Isothiazolone, 2-methyl-	DNEL	Long term Inhalation	0.021 mg/ m ³	General population	Local
	DNEL	Long term Inhalation	0.021 mg/ m ³	Workers	Local
	DNEL	Long term Oral	0.027 mg/ kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	0.043 mg/ m ³	General population	Local
	DNEL	Short term Inhalation	0.043 mg/ m ³	Workers	Local
	DNEL	Short term Oral	0.053 mg/	General	Systemic

Rapidpoint 405 Measurement Cartridge BG+COox							
SECTION 8: Exposure controls/personal protection							
sodium hydroxide	DNEL	Long term Inhalation	kg bw/day 1 mg/m³	population General population	Local		
	DNEL	Long term Inhalation	1 mg/m³	Workers	Local		

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. Contaminated work clothing should not be allowed out of the workplace. 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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: Inner Fill SolutionLiquid.RCX ReagentLiquid.200 Cal ReagentLiquid.Zero CalLiquid.

SECTION 9: Physical and chemical properties

Colour: Inner Fill Solution Colourless.

RCX Reagent Red.
200 Cal Reagent Colourless.
Zero Cal Colourless.
Inner Fill Solution Odourless.

RCX Reagent Odourless.
200 Cal Reagent Odourless.
Zero Cal Odourless.

Odour threshold : Not relevant/applicable due to nature of the product.

Melting point/freezing point: Not relevant/applicable due to nature of the product.

Softening point : Not relevant/applicable due to nature of the product.

Sublimation temperature: Not relevant/applicable due to nature of the product.

Initial boiling point and: Inner Fill SolutionNot available.boiling rangeRCX ReagentNot available.

200 Cal Reagent Not available. Zero Cal Not available.

Flammability (solid, gas) : Inner Fill Solution Not relevant/applicable due to nature

of the product.

RCX Reagent Not relevant/applicable due to nature of the product.

200 Cal Reagent Not relevant/applicable due to nature

of the product.

Zero Cal Not relevant/applicable due to nature

of the product.

Upper/lower flammability or

explosive limits

Odour

: Inner Fill Solution Not available.
RCX Reagent Not available.
200 Cal Reagent Not available.
Zero Cal Not available.

Flash point : Inner Fill Solution [Product does not sustain combustion.]

RCX Reagent [Product does not sustain combustion.]
200 Cal Reagent [Product does not sustain combustion.]
Zero Cal [Product does not sustain combustion.]

	Closed cup		Open cup			
Ingredient name	°C	°F	Method	°C	°F	Method
Inner Fill Solution						
Octadecan-1-ol, ethoxylated	193.5	380.3				
RCX Reagent						
Octadecan-1-ol, ethoxylated	193.5	380.3				
200 Cal Reagent						
triethyl orthoformate	35	95				
Zero Cal						
Octadecan-1-ol, ethoxylated	193.5	380.3				

Auto-ignition temperature

Ingredient name	°C	°F	Method
RCX Reagent			
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, hydrate (1:1)	1010	1850	
200 Cal Reagent			
1,1'-oxydipropan-2-ol	310	590	

SECTION 9: Physical and chemical properties

Zero Cal			
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, hydrate (1:1)	1010	1850	

Decomposition temperature: Not relevant/applicable due to nature of the product.

pH : Inner Fill Solution Not applicable.

RCX Reagent 6.8 200 Cal Reagent 6.82 Zero Cal 7.4

Viscosity : Inner Fill Solution Not available.

RCX Reagent Not available.
200 Cal Reagent Not available.
Zero Cal Not available.

Solubility(ies) :

Not available.

Solubility in water : Not relevant/applicable due to nature of the product.

Miscible with water : Not relevant/applicable due to nature of the product.

Partition coefficient: n-octanol/ : Not relevant/applicable due to nature of the product.

water

Vapour pressure

Va		apour Pres	ssure at 20°C	Vapour pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
nner Fill Solution						
water	23.8	3.2				
RCX Reagent						
vater	23.8	3.2				
200 Cal Reagent						
vater	23.8	3.2				
Zero Cal						
vater	23.8	3.2				

Evaporation rate : Not relevant/applicable due to nature of the product.

Relative density: Inner Fill Solution >1
RCX Reagent <1
200 Cal Reagent 1
Zero Cal <1

Density: Inner Fill Solution Not available.

RCX Reagent Not available.
200 Cal Reagent Not available.
Zero Cal Not available.

Vapour density : Inner Fill Solution Not available.

RCX Reagent
200 Cal Reagent
Zero Cal
Not available.
Not available.
Not available.
Not available.

Explosive properties : Inner Fill Solution Not available. RCX Reagent Not available.

200 Cal Reagent Not available.
 Zero Cal Not available.
 Inner Fill Solution Not available.

Oxidising properties: Inner Fill SolutionNot available.RCX ReagentNot available.200 Cal ReagentNot available.Zero CalNot available.

SECTION 9: Physical and chemical properties

Particle characteristics

Median particle size : Not applicable.

9.2 Other information

Not available. Fire point : Inner Fill Solution

Not available. RCX Reagent 200 Cal Reagent Not available. Zero Cal Not available.

Burning time : Not relevant/applicable due to nature of the product.

Fundamental burning velocity : Not relevant/applicable due to nature of the product. **Burning rate** Not relevant/applicable due to nature of the product. SADT : Not relevant/applicable due to nature of the product. **SAPT** : Not relevant/applicable due to nature of the product. **Heat of reaction** : Not relevant/applicable due to nature of the product. Heat of combustion : Not relevant/applicable due to nature of the product.

Flow time (ISO 2431) : Not relevant/applicable due to nature of the product. : Not relevant/applicable due to nature of the product. Molecular weight

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of : Under normal conditions of storage and use, hazardous reactions will not occur.

hazardous reactions

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : No specific data.

10.6 Hazardous : Under normal conditions of storage and use, hazardous decomposition products decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Conclusion/Summary : Inner Fill Solution Not available. **RCX** Reagent Not available.

200 Cal Reagent Not available. Zero Cal 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)
RCX Reagent 3(2H)-Isothiazolone, 2-methyl-	100	300	N/A	0.5	N/A

Irritation/Corrosion

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
RCX Reagent					
sodium hydroxide	Eyes - Mild irritant	Rabbit	-	400 ug	-
	Eyes - Severe irritant	Monkey	-	24 hours 1 %	-
	Eyes - Severe irritant	Rabbit	-	1 %	-
	Eyes - Severe irritant	Rabbit	-	0.5 minutes	-
				1 mg	
	Eyes - Severe irritant	Rabbit	-	24 hours 50	-
				ug	
	Skin - Mild irritant	Human	-	24 hours 2 %	-
	Skin - Severe irritant	Rabbit	-	24 hours 500	-
				mg	

Conclusion/Summary

Skin : Inner Fill Solution Not available.

RCX Reagent Not available.
200 Cal Reagent Not available.
Zero Cal Not available.

Eyes : Inner Fill Solution Not available.
RCX Reagent Not available.
200 Cal Reagent Not available.
Zero Cal Not available.

Respiratory: Inner Fill SolutionNot available.RCX ReagentNot available.200 Cal ReagentNot available.

Zero Cal Not available.

Sensitisation

Conclusion/Summary

Skin : Inner Fill Solution Not available.
RCX Reagent Not available.

200 Cal Reagent Not available.

Zero Cal Not available.

Not available.

Respiratory: Inner Fill SolutionNot available.RCX ReagentNot available.200 Cal ReagentNot available.

Zero Cal Not available.

Mutagenicity

Conclusion/Summary: Inner Fill Solution Not available.

RCX Reagent Not available.
200 Cal Reagent Not available.
Zero Cal Not available.

Carcinogenicity

Conclusion/Summary : Inner Fill Solution Not available.

RCX Reagent Not available.
200 Cal Reagent Not available.
Zero Cal Not available.

Reproductive toxicity

Conclusion/Summary : Inner Fill Solution Not available.

RCX Reagent Not available.

200 Cal Reagent Not available.

Zero Cal Not available.

Teratogenicity

Conclusion/Summary : Inner Fill Solution Not available.

RCX Reagent Not available.
200 Cal Reagent Not available.
Zero Cal Not available.

Specific target organ toxicity (single exposure)

Not available.

SECTION 11: Toxicological information

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes

of exposure

Inhalation

: Inner Fill Solution RCX Reagent 200 Cal Reagent Zero Cal

Not available. Not available. Not available. Not available.

Potential acute health effects

Eye contact : Inner Fill Solution

> hazards. No known significant effects or critical

hazards.

200 Cal Reagent

RCX Reagent

No known significant effects or critical

No known significant effects or critical

hazards.

Zero Cal No known significant effects or critical

hazards.

Inhalation : Inner Fill Solution No known significant effects or critical

hazards.

RCX Reagent No known significant effects or critical

hazards.

200 Cal Reagent No known significant effects or critical

hazards.

Zero Cal No known significant effects or critical

hazards.

Skin contact : Inner Fill Solution No known significant effects or critical

RCX Reagent May cause an allergic skin reaction. 200 Cal Reagent No known significant effects or critical

hazards.

Zero Cal No known significant effects or critical

hazards.

Ingestion : Inner Fill Solution No known significant effects or critical

hazards.

RCX Reagent No known significant effects or critical

hazards.

200 Cal Reagent No known significant effects or critical

hazards.

Zero Cal No known significant effects or critical

hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Inner Fill Solution No specific data. RCX Reagent No specific data.

200 Cal Reagent No specific data. Zero Cal No specific data. : Inner Fill Solution No specific data.

RCX Reagent No specific data. No specific data. 200 Cal Reagent

No specific data. Zero Cal Skin contact : Inner Fill Solution No specific data.

> Adverse symptoms may include the **RCX** Reagent

> > following: irritation redness

200 Cal Reagent No specific data. Zero Cal No specific data.

SECTION 11: Toxicological information

Ingestion : Inner Fill Solution No specific data.

RCX Reagent No specific data.

200 Cal Reagent No specific data.

Zero Cal No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate : Inner Fill Solution Not available.

effects RCX Reagent Not available.
200 Cal Reagent Not available.
Zero Cal Not available.

Potential delayed effects : Inner Fill Solution Not available.

RCX Reagent Not available.
200 Cal Reagent Not available.
Zero Cal Not available.

Long term exposure

Potential immediate : Inner Fill Solution Not available.

effectsRCX ReagentNot available.200 Cal ReagentNot available.

Potential delayed effects : Inner Fill Solution Not available.

Zero Cal

RCX Reagent Not available.
200 Cal Reagent Not available.
Zero Cal Not available.

Potential chronic health effects

Not available.

Conclusion/Summary: Inner Fill Solution Not available.

RCX Reagent Not available.
200 Cal Reagent Not available.
Zero Cal Not available.

General : Inner Fill Solution No known significant effects or critical

hazards.

Not available.

RCX Reagent Once sensitized, a severe allergic

reaction may occur when subsequently

exposed to very low levels.

200 Cal Reagent No known significant effects or critical

hazards.

Zero Cal No known significant effects or critical

hazards.

Carcinogenicity : Inner Fill Solution No known significant effects or critical

hazards.

RCX Reagent No known significant effects or critical

hazards.

200 Cal Reagent No known significant effects or critical

hazards.

Zero Cal No known significant effects or critical

hazards.

Mutagenicity: Inner Fill Solution No known significant effects or critical

hazards.

RCX Reagent No known significant effects or critical

hazards.

200 Cal Reagent No known significant effects or critical

hazards.

Zero Cal No known significant effects or critical

hazards.

SECTION 11: Toxicological information

Reproductive toxicity: Inner Fill Solution: No known significant effects or critical hazards.

RCX Reagent: No known significant effects or critical hazards.

200 Cal Reagent: No known significant effects or critical

200 Cal Reagent No known significant effects or critical hazards.

Zero Cal No known significant effects or critical

hazards.

Interactive effects : Inner Fill Solution Not available.
RCX Reagent Not available.

200 Cal Reagent Not available. Zero Cal Not available.

Toxicokinetics

Absorption: Inner Fill SolutionNot available.RCX ReagentNot available.

200 Cal Reagent Not available.
Zero Cal Not available.

 Distribution
 : Inner Fill Solution
 Not available.

 RCX Reagent
 Not available.

 200 Cal Reagent
 Not available.

200 Cal Reagent Not available.

Zero Cal Not available.

 Metabolism
 : Inner Fill Solution
 Not available.

 RCX Reagent
 Not available.

 200 Cal Reagent
 Not available.

200 Cal Reagent Zero Cal
 Inner Fill Solution Not available.
 RCX Reagent Not available.
 Not available.
 Not available.

200 Cal Reagent Not available. Zero Cal Not available.

Other information : Inner Fill Solution Not available.

RCX Reagent Not available. 200 Cal Reagent Not available. Zero Cal Not available.

SECTION 12: Ecological information

12.1 Toxicity

Elimination

Product/ingredient name	Result	Species	Exposure
Inner Fill Solution			
silver chloride	Acute LC50 5.3 μg/l Fresh water	Fish - Guntea Loach - Lepidocephalichthys guntea	96 hours
RCX Reagent			
3(2H)-Isothiazolone, 2-methyl-	Acute EC50 0.18 ppm Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
,	Acute LC50 0.07 ppm Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	96 hours
sodium hydroxide	Acute EC50 40.38 mg/l Fresh water	Crustaceans - Water flea - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 125 ppm Fresh water	Fish - Western mosquitofish - Gambusia affinis - Adult	96 hours

Conclusion/Summary: Inner Fill SolutionNot available.RCX ReagentNot available.200 Cal ReagentNot available.Zero CalNot available.

12.2 Persistence and degradability

SECTION 12: Ecological information

Conclusion/Summary : Inner Fill Solution

Inner Fill SolutionNot available.RCX ReagentNot available.200 Cal ReagentNot available.Zero CalNot available.

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Inner Fill Solution silver chloride	-	70	low

12.4 Mobility in soil

Soil/water partition : Inner Fill Solution Not available. **RCX** Reagent Not available. coefficient (Koc) 200 Cal Reagent Not available. Zero Cal Not available. : Inner Fill Solution Not available. **Mobility RCX** Reagent Not available. Not available. 200 Cal Reagent

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

Zero Cal

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

Not available.

with jurisdiction.

Hazardous waste

: The classification of the product may meet the criteria for a hazardous waste.

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. Care should be

taken when handling emptied containers that have not been cleaned or rinsed out. 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

Inner Fill Solution

ADR/RID

14.1 UN number Inner Fill Solution Not regulated.

RCX Reagent Not regulated. 200 Cal Reagent Not regulated. Zero Cal Not regulated.

14.2 UN proper shipping name

RCX Reagent - 200 Cal Reagent - Zero Cal -

SECTION 14: Transport information				
14.3 Transport hazard class(es)	Inner Fill Solution RCX Reagent 200 Cal Reagent Zero Cal	- - - -		
14.4 Packing group	Inner Fill Solution RCX Reagent 200 Cal Reagent Zero Cal	- - - -		
14.5 Environmental hazards	Inner Fill Solution RCX Reagent 200 Cal Reagent Zero Cal	No. No. No. No.		
Additional information	Inner Fill Solution RCX Reagent 200 Cal Reagent Zero Cal	- - - -		
<u>ADN</u>				
14.1 UN number	Inner Fill Solution RCX Reagent 200 Cal Reagent Zero Cal	Not regulated. Not regulated. Not regulated. Not regulated.		
14.2 UN proper shipping name	Inner Fill Solution RCX Reagent 200 Cal Reagent Zero Cal	- - -		
14.3 Transport hazard class(es)	Inner Fill Solution RCX Reagent 200 Cal Reagent Zero Cal	- - - -		
14.4 Packing group	Inner Fill Solution RCX Reagent 200 Cal Reagent Zero Cal	- - - -		
14.5 Environmental hazards	Inner Fill Solution RCX Reagent 200 Cal Reagent Zero Cal	No. No. No. No.		
Additional information	Inner Fill Solution RCX Reagent 200 Cal Reagent Zero Cal	- - - -		
IMDG 14.1 UN number	Inner Fill Solution RCX Reagent 200 Cal Reagent Zero Cal	Not regulated. Not regulated. Not regulated. Not regulated.		
14.2 UN proper shipping name	Inner Fill Solution RCX Reagent 200 Cal Reagent Zero Cal	- - - -		

SECTION 14: Transport information

14.3 Transport	Inner Fill Solution	-
hazard class(es)	RCX Reagent	-
	200 Cal Reagent	

200 Cal Reagent Zero Cal

14.4 Packing
groupInner Fill Solution
RCX Reagent-

200 Cal Reagent - Zero Cal -

14.5Inner Fill SolutionNo.EnvironmentalRCX ReagentNo.hazards200 Cal ReagentNo.Zero CalNo.

Additional Inner Fill Solution - RCX Reagent -

200 Cal Reagent - Zero Cal -

<u>IATA</u>

14.1 UN numberInner Fill SolutionNot regulated.RCX ReagentNot regulated.200 Cal ReagentNot regulated.

200 Cal Reagent Not regulated. Zero Cal Not regulated.

14.2 UN proper Inner Fill Solution - RCX Reagent -

200 Cal Reagent - Zero Cal -

14.3 Transport Inner Fill Solution -

hazard class(es) RCX Reagent - 200 Cal Reagent - Zero Cal -

14.4 Packing Inner Fill Solution - group RCX Reagent -

200 Cal Reagent -

Zero Cal -

14.5Inner Fill SolutionNo.EnvironmentalRCX ReagentNo.hazards200 Cal ReagentNo.

Zero Cal No.

Additional Inner Fill Solution Information RCX Reagent 200 Cal Reagent -

Zero Cal -

14.6 Special precautions for : Inner Fill Solution

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.

RCX Reagent Transport within user's premises:

always transport in closed containers that are upright and secure. Ensure that

SECTION 14: Transport information

persons transporting the product know what to do in the event of an accident or

spillage.

200 Cal Reagent 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.

Zero Cal 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 applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture UK (GB) /REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Inner Fill Solution RCX Reagent 200 Cal Reagent Zero Cal Not applicable. Not applicable. Not applicable. Not applicable.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

EU regulations

Water

Industrial emissions (integrated pollution prevention and control) -Air

prevention and control) -

Industrial emissions

(integrated pollution

: Inner Fill Solution RCX Reagent 200 Cal Reagent Zero Cal

: Inner Fill Solution RCX Reagent 200 Cal Reagent Zero Cal Not listed

SECTION 15: Regulatory information

International regulations

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.

15.2 Chemical safety

: Not applicable.

assessment

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and

: ATE = Acute Toxicity Estimate

GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and acronyms

Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019

No. 720 and amendments

DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level

EUH statement = GB CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
Inner Fill Solution Aquatic Chronic 3, H412	Calculation method
RCX Reagent Skin Sens. 1, H317	Calculation method

Full text of abbreviated H statements

Inner Fill

Solution H400 H410 H412	Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects.
RCX Reagent	
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

SECTION 16: Other information

Full text of classifications

Inner Fill Solution

Aquatic Acute 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 3 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3

RCX Reagent

Acute Tox. 2 ACUTE TOXICITY - Category 2
Acute Tox. 3 ACUTE TOXICITY - Category 3

Aquatic Acute 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Eye Dam. 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1

Skin Corr. 1A SKIN CORROSION/IRRITATION - Category 1A Skin Corr. 1B SKIN CORROSION/IRRITATION - Category 1B

Skin Sens. 1 SKIN SENSITISATION - Category 1
Skin Sens. 1A SKIN SENSITISATION - Category 1A

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revision

Date of previous issue : No previous validation

Version : 1

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