SAFETY DATA SHEET

Rapidpoint 405 Measurement Cartridge

SIEMENS Healthineers

SDS no.: 130523

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

1.1 Product identifier

Product name : Rapidpoint 405 Measurement Cartridge

Product code : 130522; 130523; 04913211; 00724090; 10310469; 10313971; 10283222

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.
		RCX Reagent	H317 - 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.

Precautionary statements

Prevention	:	Inner Fill Solution	P273 - Avoid release to the environment.
		RCX Reagent	P280 - Wear protective gloves/protective clothing/eye protection/face protection.
		200 Cal Reagent	Not applicable.
		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.
Storage	:	Inner Fill Solution	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.
		Zero Cal	Not applicable.
Supplemental label elements	:	Inner Fill Solution	Not applicable.
		RCX Reagent	Not applicable.
		200 Cal Reagent	Contains reaction mass of: 5-chloro-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.
		Zero Cal	Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Inner Fill Solution	Not applicable.
		RCX Reagent	Not applicable.
		200 Cal Reagent	Not applicable.
		Zero Cal	Not applicable.

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	None known.
	RCX Reagent	None known.
	200 Cal Reagent	None known.
	Zero Cal	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	Type
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 the full text of the H statements declared above.**	[1] [2]

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.
		Zero Cal	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 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

SECTION 4: First aid measures

			symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
		200 Cal Reagent	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		Zero Cal	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.
		RCX Reagent	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.
		200 Cal Reagent	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.
		Zero Cal	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	No action shall be taken involving any personal risk or without suitable training.
		RCX Reagent	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.
		200 Cal Reagent	No action shall be taken involving any personal risk or without suitable training.
		Zero Cal	No action shall be taken involving any personal risk or without suitable training.

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	No specific data.
		200 Cal Reagent	No specific data.
		Zero Cal	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.
Skin contact	:	Inner Fill Solution	No specific data.
		RCX Reagent	Adverse 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.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	:	Inner Fill Solution	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		RCX Reagent	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 mode.

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 solutions : Not available.

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	Type	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/m³	Workers	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/m³	General population	Local
	DNEL	Long term Inhalation	0.021 mg/m³	Workers	Local
	DNEL	Long term Oral	0.027 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	0.043 mg/m³	General population	Local
	DNEL	Short term Inhalation	0.043 mg/m³	Workers	Local
	DNEL	Short term Oral	0.053 mg/	General	Systemic

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 Solution	Liquid.
		RCX Reagent	Liquid.
		200 Cal Reagent	Liquid.
		Zero Cal	Liquid.

SECTION 9: Physical and chemical properties

Colour : Inner Fill Solution — Colourless.
RCX Reagent — Red.
200 Cal Reagent — Colourless.
Zero Cal — Colourless.

Odour : 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 boiling range : Inner Fill Solution — Not available.
RCX Reagent — Not 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 : 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/ water : Not relevant/applicable due to nature of the product.

Vapour pressure :

	Vapour Pressure at 20˚C			Vapour pressure at 50˚C		
Ingredient name	**mm Hg**	**kPa**	**Method**	**mm Hg**	**kPa**	**Method**
Inner Fill Solution						
water	23.8	3.2				
RCX Reagent						
water	23.8	3.2				
200 Cal Reagent						
water	23.8	3.2				
Zero Cal						
water	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	Not available.
200 Cal Reagent	Not available.
Zero Cal	Not available.

Explosive properties :

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

Oxidising properties :

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

SECTION 9: Physical and chemical properties

Particle characteristics

Median particle size : Not applicable.

9.2 Other information

Fire point	:	Inner Fill Solution	Not available.
		RCX Reagent	Not available.
		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.	
Molecular weight	:	Not relevant/applicable due to nature of the product.	

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

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : No specific data.

10.6 Hazardous decomposition products : 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

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

Potential acute health effects

Eye contact	:	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.
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 hazards.
		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.
Inhalation	:	Inner Fill Solution	No specific data.
		RCX Reagent	No specific data.
		200 Cal Reagent	No specific data.
		Zero Cal	No specific data.
Skin contact	:	Inner Fill Solution	No specific data.
		RCX Reagent	Adverse symptoms may include the 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 effects	:	Inner Fill Solution	Not available.
		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 effects	:	Inner Fill Solution	Not available.
		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.

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

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

12.2 Persistence and degradability

SECTION 12: Ecological information

Conclusion/Summary :

Inner Fill Solution	Not available.
RCX Reagent	Not available.
200 Cal Reagent	Not available.
Zero Cal	Not 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 coefficient (K_{OC}) :

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

Mobility :

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

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.

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 : 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

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

Inner Fill Solution	-
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	No.
	RCX Reagent	No.
	200 Cal Reagent	No.
	Zero Cal	No.
Additional information	Inner Fill Solution	-
	RCX Reagent	-
	200 Cal Reagent	-
	Zero Cal	-

ADN

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	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	No.
	RCX Reagent	No.
	200 Cal Reagent	No.
	Zero Cal	No.
Additional information	Inner Fill Solution	-
	RCX Reagent	-
	200 Cal Reagent	-
	Zero Cal	-

IMDG

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	Inner Fill Solution	-
	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	No.
	RCX Reagent	No.
	200 Cal Reagent	No.
	Zero Cal	No.
Additional information	Inner Fill Solution	-
	RCX Reagent	-
	200 Cal Reagent	-
	Zero Cal	-

IATA

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	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	No.
	RCX Reagent	No.
	200 Cal Reagent	No.
	Zero Cal	No.
Additional information	Inner Fill Solution	-
	RCX Reagent	-
	200 Cal Reagent	-
	Zero Cal	-

14.6 Special precautions for user : Inner Fill Solution

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

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

EU regulations

Industrial emissions (integrated pollution prevention and control) - Air	:	Inner Fill Solution	Not listed
		RCX Reagent	Not listed
		200 Cal Reagent	Not listed
		Zero Cal	Not listed
Industrial emissions (integrated pollution prevention and control) - Water	:	Inner Fill Solution	Not listed
		RCX Reagent	Not listed
		200 Cal Reagent	Not listed
		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 assessment : Chemical Safety Assessments for all substances in this product are either Complete or Not applicable.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and 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	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	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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Version : 1

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