(2012 OSHA Hazard Communication Standard (29 CFR 1910.1200))

SAFETY DATA SHEET

SIEMENS

Atellica™ CH Gamma-Glutamyl Transferase (GGT)

SDS # : 11097597

Section 1. Identification

Product identifier : Atellica™ CH Gamma-Glutamyl Transferase (GGT)

Product code : 11097597

Product type : Liquid.

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

Not applicable.

Manufactured/supplied : Siemens Healthcare Diagnostics Inc.
511 Benedict Avenue
Tarrytown, NY 10591-5097 USA
1-877-229-3711

(800) 424-9300 (CHEMTREC) (24/365)

Section 2. Hazards identification

OSHA/HCS status : GGT R1 Reagent — This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

GGT R2 Reagent — This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : GGT R1 Reagent — SKIN SENSITIZATION - Category 1

GGT R2 Reagent — SKIN SENSITIZATION - Category 1

Additional information : Not available.

Not available.

GHS label elements

Hazard pictograms :

Signal word : GGT R1 Reagent — Warning

GGT R2 Reagent — Warning

Hazard statements : GGT R1 Reagent — H317 - May cause an allergic skin reaction.

GGT R2 Reagent — H317 - May cause an allergic skin reaction.

Precautionary statements

Prevention : GGT R1 Reagent — P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P272 - Contaminated work clothing should not be allowed out of the workplace.

GGT R2 Reagent — P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P272 - Contaminated work clothing should not be allowed out of the workplace.

Response : GGT R1 Reagent — P302 + P352 + P363 - IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse.
P333 + P313 - If skin irritation or rash occurs: Get medical attention.

GGT R2 Reagent — P302 + P352 + P363 - IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse.

Section 2. Hazards identification

			P333 + P313 - If skin irritation or rash occurs: Get medical attention.
Storage	:	GGT R1 Reagent	Not applicable.
		GGT R2 Reagent	Not applicable.
Disposal	:	GGT R1 Reagent	P501 - Dispose of contents and container in accordance with all local, regional, and national regulations.
		GGT R2 Reagent	P501 - Dispose of contents and container in accordance with all local, regional, and national regulations.
Supplemental label elements	:	GGT R1 Reagent	None known.
		GGT R2 Reagent	None known.
Hazards not otherwise classified	:	GGT R1 Reagent	None known.
		GGT R2 Reagent	None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	GGT R1 Reagent	Mixture
		GGT R2 Reagent	Mixture

Ingredient name	%	CAS number
GGT R1 Reagent 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)	<0.05	55965-84-9
GGT R2 Reagent 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)	<0.05	55965-84-9

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

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

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	:	GGT R1 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.
		GGT R2 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.
Inhalation	:	GGT R1 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. In case of

Section 4. First aid measures

		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.
	GGT R2 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.
Skin contact	: GGT R1 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 symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	GGT R2 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 symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: GGT R1 Reagent	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.
	GGT R2 Reagent	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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

Section 4. First aid measures

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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	:	GGT R1 Reagent	No known significant effects or critical hazards.
		GGT R2 Reagent	No known significant effects or critical hazards.
Inhalation	:	GGT R1 Reagent	No known significant effects or critical hazards.
		GGT R2 Reagent	No known significant effects or critical hazards.
Skin contact	:	GGT R1 Reagent	May cause an allergic skin reaction.
		GGT R2 Reagent	May cause an allergic skin reaction.
Ingestion	:	GGT R1 Reagent	No known significant effects or critical hazards.
		GGT R2 Reagent	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	:	GGT R1 Reagent	No specific data.
		GGT R2 Reagent	No specific data.
Inhalation	:	GGT R1 Reagent	No specific data.
		GGT R2 Reagent	No specific data.
Skin contact	:	GGT R1 Reagent	Adverse symptoms may include the following: irritation redness
		GGT R2 Reagent	Adverse symptoms may include the following: irritation redness
Ingestion	:	GGT R1 Reagent	No specific data.
		GGT R2 Reagent	No specific data.

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

Notes to physician	:	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	:	No specific treatment.
Protection of first-aiders	:	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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : In case of fire, use water spray (fog), foam or dry chemical.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

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

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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for 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 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 spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

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 vapor 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.

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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection 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.

Section 9. Physical and chemical properties

Physical state	:	GGT R1 Reagent	Liquid.
		GGT R2 Reagent	Liquid.
Color	:	GGT R1 Reagent	Colorless.
		GGT R2 Reagent	Colorless.
Odor	:	GGT R1 Reagent	Odorless.
		GGT R2 Reagent	Odorless.
pH	:	GGT R1 Reagent	8.2
		GGT R2 Reagent	6
Flash point	:	GGT R1 Reagent	Not available.
		GGT R2 Reagent	Not available.
Flammability (solid, gas)	:	GGT R1 Reagent	Not relevant/applicable due to nature of the product.
		GGT R2 Reagent	Not relevant/applicable due to nature of the product.
Relative density	:	GGT R1 Reagent	1
		GGT R2 Reagent	1
Solubility in water	:	GGT R1 Reagent	Not relevant/applicable due to nature of the product.
		GGT R2 Reagent	Not relevant/applicable due to nature of the product.
Partition coefficient: n-octanol/water	:	GGT R1 Reagent	Not available.
		GGT R2 Reagent	Not available.
Auto-ignition temperature	:	GGT R1 Reagent	Not available.
		GGT R2 Reagent	Not available.
Viscosity	:	GGT R1 Reagent	Not available.
		GGT R2 Reagent	Not available.

Aerosol product

Type of aerosol	:	GGT R1 Reagent	Not applicable.
		GGT R2 Reagent	Not applicable.

Section 10. Stability and reactivity

Reactivity	:	GGT R1 Reagent	No specific test data related to reactivity available for this product or its ingredients.
		GGT R2 Reagent	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	GGT R1 Reagent	The product is stable.
		GGT R2 Reagent	The product is stable.
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.	
Conditions to avoid	:	GGT R1 Reagent	No specific data.
		GGT R2 Reagent	No specific data.
Incompatible materials	:	GGT R1 Reagent	No specific data.
		GGT R2 Reagent	No specific data.
Hazardous decomposition products	:	GGT R1 Reagent	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
		GGT R2 Reagent	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
GGT R1 Reagent 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)	LD50 Oral	Rat	53 mg/kg	-
GGT R2 Reagent 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)	LD50 Oral	Rat	53 mg/kg	-

Conclusion/Summary : GGT R1 Reagent: Not available.
GGT R2 Reagent: Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
GGT R1 Reagent 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)	Skin - Severe irritant	Human	-	0.01 Percent	-
GGT R2 Reagent 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)	Skin - Severe irritant	Human	-	0.01 Percent	-

Conclusion/Summary

Skin : GGT R1 Reagent: Not available.
GGT R2 Reagent: Not available.

Eyes : GGT R1 Reagent: Not available.
GGT R2 Reagent: Not available.

Respiratory : GGT R1 Reagent: Not available.
GGT R2 Reagent: Not available.

Sensitization

Not available.

Conclusion/Summary

Skin : GGT R1 Reagent: Not available.
GGT R2 Reagent: Not available.

Respiratory : GGT R1 Reagent: Not available.
GGT R2 Reagent: Not available.

Mutagenicity

Not available.

Conclusion/Summary : GGT R1 Reagent: Not available.
GGT R2 Reagent: Not available.

Carcinogenicity

Not available.

Conclusion/Summary : GGT R1 Reagent: Not available.
GGT R2 Reagent: Not available.

Reproductive toxicity

Not available.

Section 11. Toxicological information

Conclusion/Summary	:	GGT R1 Reagent	Not available.
		GGT R2 Reagent	Not available.

Teratogenicity

Not available.

Conclusion/Summary	:	GGT R1 Reagent	Not available.
		GGT R2 Reagent	Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure	:	GGT R1 Reagent	Not available.
		GGT R2 Reagent	Not available.

Potential acute health effects

Eye contact	:	GGT R1 Reagent	No known significant effects or critical hazards.
		GGT R2 Reagent	No known significant effects or critical hazards.
Inhalation	:	GGT R1 Reagent	No known significant effects or critical hazards.
		GGT R2 Reagent	No known significant effects or critical hazards.
Skin contact	:	GGT R1 Reagent	May cause an allergic skin reaction.
		GGT R2 Reagent	May cause an allergic skin reaction.
Ingestion	:	GGT R1 Reagent	No known significant effects or critical hazards.
		GGT R2 Reagent	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	:	GGT R1 Reagent	No specific data.
		GGT R2 Reagent	No specific data.
Inhalation	:	GGT R1 Reagent	No specific data.
		GGT R2 Reagent	No specific data.
Skin contact	:	GGT R1 Reagent	Adverse symptoms may include the following: irritation redness
		GGT R2 Reagent	Adverse symptoms may include the following: irritation redness
Ingestion	:	GGT R1 Reagent	No specific data.
		GGT R2 Reagent	No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects	:	GGT R1 Reagent	Not available.
		GGT R2 Reagent	Not available.
Potential delayed effects	:	GGT R1 Reagent	Not available.
		GGT R2 Reagent	Not available.

Long term exposure

Potential immediate effects	:	GGT R1 Reagent	Not available.
		GGT R2 Reagent	Not available.

Section 11. Toxicological information

Potential delayed effects : GGT R1 Reagent — Not available.
GGT R2 Reagent — Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available. — GGT R1 Reagent
Not available. — GGT R2 Reagent

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Interactive effects : GGT R1 Reagent — Not available.
GGT R2 Reagent — Not available.

Other information : GGT R1 Reagent — Not available.
GGT R2 Reagent — Not available.

Section 12. Ecological information

Toxicity

Not available.

Conclusion/Summary : GGT R1 Reagent — Not available.
GGT R2 Reagent — Not available.

Persistence and degradability

Conclusion/Summary : GGT R1 Reagent — Not available.
GGT R2 Reagent — Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{OC}) : GGT R1 Reagent — Not available.
GGT R2 Reagent — Not available.

Mobility : GGT R1 Reagent — Not available.
GGT R2 Reagent — Not available.

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

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been

Section 13. Disposal considerations

cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

DOT Classification

UN number	GGT R1 Reagent	Not regulated.
	GGT R2 Reagent	Not regulated.
UN proper shipping name	GGT R1 Reagent	-
	GGT R2 Reagent	-
Transport hazard class(es)	GGT R1 Reagent	-
	GGT R2 Reagent	-
Packing group	GGT R1 Reagent	-
	GGT R2 Reagent	-
Environmental hazards	GGT R1 Reagent	No.
	GGT R2 Reagent	No.
Additional information	GGT R1 Reagent	-
	GGT R2 Reagent	-

TDG Classification

UN number	GGT R1 Reagent	Not regulated.
	GGT R2 Reagent	Not regulated.
UN proper shipping name	GGT R1 Reagent	-
	GGT R2 Reagent	-
Transport hazard class(es)	GGT R1 Reagent	-
	GGT R2 Reagent	-
Packing group	GGT R1 Reagent	-
	GGT R2 Reagent	-
Environmental hazards	GGT R1 Reagent	No.
	GGT R2 Reagent	No.
Additional information	GGT R1 Reagent	-
	GGT R2 Reagent	-

ADR/RID

UN number	GGT R1 Reagent	Not regulated.
	GGT R2 Reagent	Not regulated.
UN proper shipping name	GGT R1 Reagent	-
	GGT R2 Reagent	-
Transport hazard class(es)	GGT R1 Reagent	-
	GGT R2 Reagent	-
Packing group	GGT R1 Reagent	-
	GGT R2 Reagent	-
Environmental hazards	GGT R1 Reagent	No.
	GGT R2 Reagent	No.

Section 14. Transport information

Additional information	GGT R1 Reagent	-
	GGT R2 Reagent	-

IMDG

UN number	GGT R1 Reagent	Not regulated.
	GGT R2 Reagent	Not regulated.
UN proper shipping name	GGT R1 Reagent	-
	GGT R2 Reagent	-
Transport hazard class(es)	GGT R1 Reagent	-
	GGT R2 Reagent	-
Packing group	GGT R1 Reagent	-
	GGT R2 Reagent	-
Environmental hazards	GGT R1 Reagent	No.
	GGT R2 Reagent	No.
Additional information	GGT R1 Reagent	-
	GGT R2 Reagent	-

IATA

UN number	GGT R1 Reagent	Not regulated.
	GGT R2 Reagent	Not regulated.
UN proper shipping name	GGT R1 Reagent	-
	GGT R2 Reagent	-
Transport hazard class(es)	GGT R1 Reagent	-
	GGT R2 Reagent	-
Packing group	GGT R1 Reagent	-
	GGT R2 Reagent	-
Environmental hazards	GGT R1 Reagent	No.
	GGT R2 Reagent	No.
Additional information	GGT R1 Reagent	-
	GGT R2 Reagent	-

Special precautions for user : GGT R1 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.

GGT R2 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.

Transport in bulk according to Annex II of MARPOL and the IBC Code Not applicable.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

United States inventory (TSCA 8b): Not determined.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
GGT R1 Reagent 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)	<0.05	No.	No.	No.	Yes.	No.
GGT R2 Reagent 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)	<0.05	No.	No.	No.	Yes.	No.

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

International regulations

Chemical Weapons Convention List Schedule I Chemicals :	GGT R1 Reagent	Not listed
	GGT R2 Reagent	Not listed
Chemical Weapons Convention List Schedule II Chemicals :	GGT R1 Reagent	Not listed
	GGT R2 Reagent	Not listed
Chemical Weapons Convention List Schedule III Chemicals :	GGT R1 Reagent	Not listed
	GGT R2 Reagent	Not listed

Section 16. Other information

History

Date of issue/Date of revision : 7/10/2018

Version : 1.03

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Indicates information that has changed from previously issued version.