SAFETY DATA SHEET

Emit® 2000 Carbamazepine Assay

SIEMENS Healthineers

SDS # : SY4F019

Section 1. Identification

Product identifier : Emit® 2000 Carbamazepine Assay

Product type : Liquid.

Product code : 4F019UL, OSR4F229, 10445309, 10445311, 10462021, 01181392

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

Identified uses Diagnostic agents.

Restrictions on use For professional users only.

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

In case of emergency : (800) 424-9300 (CHEMTREC)

Section 2. Hazard identification

Classification of the substance or mixture : Not classified.

GHS label elements

Signal word	: Carbamazepine Reagent 1	No signal word.
	Carbamazepine Reagent 2	No signal word.
Hazard statements	: Carbamazepine Reagent 1	No known significant effects or critical hazards.
	Carbamazepine Reagent 2	No known significant effects or critical hazards.

Precautionary statements

Prevention	: Carbamazepine Reagent 1	Not applicable.
	Carbamazepine Reagent 2	Not applicable.
Response	: Carbamazepine Reagent 1	Not applicable.
	Carbamazepine Reagent 2	Not applicable.
Storage	: Carbamazepine Reagent 1	Not applicable.
	Carbamazepine Reagent 2	Not applicable.
Disposal	: Carbamazepine Reagent 1	Not applicable.
	Carbamazepine Reagent 2	Not applicable.
Supplemental label elements	: Carbamazepine Reagent 1	None known.
	Carbamazepine Reagent 2	None known.
Hazards not otherwise classified	: Carbamazepine Reagent 1	None known.
	Carbamazepine Reagent 2	None known.

Additional information : Not available.

Sodium azide may react with lead or copper plumbing to form highly explosive metal azides.

Section 3. Composition/information on ingredients

Substance/mixture	: Carbamazepine Reagent 1	Mixture
	Carbamazepine Reagent 2	Mixture

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

Section 4. First-aid measures

Description of necessary first aid measures

Eye contact : Carbamazepine Reagent 1 — 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.

Carbamazepine Reagent 2 — 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 : Carbamazepine Reagent 1 — 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.

Carbamazepine Reagent 2 — 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 : Carbamazepine Reagent 1 — Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Carbamazepine Reagent 2 — Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : Carbamazepine Reagent 1 — 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.

Carbamazepine Reagent 2 — Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Carbamazepine Reagent 1 — No known significant effects or critical hazards.

Carbamazepine Reagent 2 — No known significant effects or critical hazards.

Inhalation : Carbamazepine Reagent 1 — No known significant effects or critical hazards.

Carbamazepine Reagent 2 — No known significant effects or critical hazards.

Section 4. First-aid measures

Skin contact	:	Carbamazepine Reagent 1	No known significant effects or critical hazards.
		Carbamazepine Reagent 2	No known significant effects or critical hazards.
Ingestion	:	Carbamazepine Reagent 1	No known significant effects or critical hazards.
		Carbamazepine Reagent 2	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	:	Carbamazepine Reagent 1	No specific data.
		Carbamazepine Reagent 2	No specific data.
Inhalation	:	Carbamazepine Reagent 1	No specific data.
		Carbamazepine Reagent 2	No specific data.
Skin contact	:	Carbamazepine Reagent 1	No specific data.
		Carbamazepine Reagent 2	No specific data.
Ingestion	:	Carbamazepine Reagent 1	No specific data.
		Carbamazepine Reagent 2	No specific data.

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

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

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	:	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	:	No specific data.
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. 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".

Section 6. Accidental release measures

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. 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. 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).

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. See Section 10 for incompatible materials before handling or use.

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. 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

Section 8. Exposure controls/personal protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state	: Carbamazepine Reagent 1	Liquid.
	Carbamazepine Reagent 2	Liquid.
Color	: Carbamazepine Reagent 1	Clear.
	Carbamazepine Reagent 2	Clear.
Odor	: Carbamazepine Reagent 1	Odorless.
	Carbamazepine Reagent 2	Odorless.
Odor threshold	: Carbamazepine Reagent 1	Not available.
	Carbamazepine Reagent 2	Not available.
pH	: Carbamazepine Reagent 1	5.5
	Carbamazepine Reagent 2	7.5
Melting point	: Carbamazepine Reagent 1	Not available.
	Carbamazepine Reagent 2	Not available.
Boiling point	: Carbamazepine Reagent 1	Not relevant/applicable due to nature of the product.
	Carbamazepine Reagent 2	Not relevant/applicable due to nature of the product.
Flash point	: Carbamazepine Reagent 1	[Product does not sustain combustion.]
	Carbamazepine Reagent 2	[Product does not sustain combustion.]
Fire point	: Carbamazepine Reagent 1	Not relevant/applicable due to nature of the product.
	Carbamazepine Reagent 2	Not relevant/applicable due to nature of the product.
Burning time	: Carbamazepine Reagent 1	Not applicable.
	Carbamazepine Reagent 2	Not applicable.
Burning rate	: Carbamazepine Reagent 1	Not applicable.
	Carbamazepine Reagent 2	Not applicable.
Evaporation rate	: Carbamazepine Reagent 1	Not available.
	Carbamazepine Reagent 2	Not available.
Flammability (solid, gas)	: Carbamazepine Reagent 1	Not relevant/applicable due to nature of the product.
	Carbamazepine Reagent 2	Not relevant/applicable due to nature of the product.
Lower and upper explosive (flammable) limits	: Carbamazepine Reagent 1	Not relevant/applicable due to nature of the product.
	Carbamazepine Reagent 2	Not relevant/applicable due to nature of the product.
Vapor pressure	: Carbamazepine Reagent 1	Not available.
	Carbamazepine Reagent 2	Not available.
Vapor density	: Carbamazepine Reagent 1	Not relevant/applicable due to nature of the product.
	Carbamazepine Reagent 2	Not relevant/applicable due to nature of the product.
Relative density	: Carbamazepine Reagent 1	Not available.
	Carbamazepine Reagent 2	Not available.

Section 9. Physical and chemical properties

Solubility(ies) :

Not available.

Solubility in water	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.
Partition coefficient: n-octanol/water	:	Carbamazepine Reagent 1	Not relevant/applicable due to nature of the product.
		Carbamazepine Reagent 2	Not relevant/applicable due to nature of the product.
Auto-ignition temperature	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.
Decomposition temperature	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.
Viscosity	:	Carbamazepine Reagent 1	Not relevant/applicable due to nature of the product.
		Carbamazepine Reagent 2	Not relevant/applicable due to nature of the product.

Section 10. Stability and reactivity

Reactivity	:	Carbamazepine Reagent 1	No specific test data related to reactivity available for this product or its ingredients.
		Carbamazepine Reagent 2	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	Carbamazepine Reagent 1	The product is stable.
		Carbamazepine Reagent 2	The product is stable.
Possibility of hazardous reactions	:	Carbamazepine Reagent 1	Under normal conditions of storage and use, hazardous reactions will not occur.
		Carbamazepine Reagent 2	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Carbamazepine Reagent 1	No specific data.
		Carbamazepine Reagent 2	No specific data.
Incompatible materials	:	Carbamazepine Reagent 1	No specific data.
		Carbamazepine Reagent 2	No specific data.
Hazardous decomposition products	:	Carbamazepine Reagent 1	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
		Carbamazepine Reagent 2	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Conclusion/Summary	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.

Irritation/Corrosion

Not available.

Conclusion/Summary

Section 11. Toxicological information

Skin	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.
Eyes	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.
Respiratory	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.

Sensitization

Not available.

Conclusion/Summary

Skin	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.
Respiratory	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.

Mutagenicity

Not available.

Conclusion/Summary	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.

Carcinogenicity

Not available.

Conclusion/Summary	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.

Reproductive toxicity

Not available.

Conclusion/Summary	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.

Teratogenicity

Not available.

Conclusion/Summary	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	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	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.

Potential acute health effects

Eye contact	:	Carbamazepine Reagent 1	No known significant effects or critical hazards.
		Carbamazepine Reagent 2	No known significant effects or critical hazards.
Inhalation	:	Carbamazepine Reagent 1	No known significant effects or critical hazards.
		Carbamazepine Reagent 2	No known significant effects or critical hazards.
Skin contact	:	Carbamazepine Reagent 1	No known significant effects or critical hazards.
		Carbamazepine Reagent 2	No known significant effects or critical hazards.

Section 11. Toxicological information

Ingestion	:	Carbamazepine Reagent 1	No known significant effects or critical hazards.
		Carbamazepine Reagent 2	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	:	Carbamazepine Reagent 1	No specific data.
		Carbamazepine Reagent 2	No specific data.
Inhalation	:	Carbamazepine Reagent 1	No specific data.
		Carbamazepine Reagent 2	No specific data.
Skin contact	:	Carbamazepine Reagent 1	No specific data.
		Carbamazepine Reagent 2	No specific data.
Ingestion	:	Carbamazepine Reagent 1	No specific data.
		Carbamazepine Reagent 2	No specific data.

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

Short term exposure

Potential immediate effects	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.
Potential delayed effects	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.

Long term exposure

Potential immediate effects	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.
Potential delayed effects	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.

Potential chronic health effects

Not available.

Conclusion/Summary	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.
General	:	Carbamazepine Reagent 1	No known significant effects or critical hazards.
		Carbamazepine Reagent 2	No known significant effects or critical hazards.
Carcinogenicity	:	Carbamazepine Reagent 1	No known significant effects or critical hazards.
		Carbamazepine Reagent 2	No known significant effects or critical hazards.
Mutagenicity	:	Carbamazepine Reagent 1	No known significant effects or critical hazards.
		Carbamazepine Reagent 2	No known significant effects or critical hazards.
Reproductive toxicity	:	No known significant effects or critical hazards.	

Numerical measures of toxicity

Acute toxicity estimates

N/A

Other information	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.

Section 12. Ecological information

Toxicity

Not available.

Conclusion/Summary	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.

Persistence and degradability

Conclusion/Summary	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (K_{OC})	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	Not available.
Mobility	:	Carbamazepine Reagent 1	Not available.
		Carbamazepine Reagent 2	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. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Sodium azide may react with lead or copper plumbing to form highly explosive metal azides.

Section 14. Transport information

	IATA	
UN number	Carbamazepine Reagent 1	Not regulated.
	Carbamazepine Reagent 2	Not regulated.
UN proper shipping name	Carbamazepine Reagent 1	-
	Carbamazepine Reagent 2	-
Transport hazard class(es)	Carbamazepine Reagent 1	-
	Carbamazepine Reagent 2	-
Packing group	Carbamazepine Reagent 1	-
	Carbamazepine Reagent 2	-
Environmental hazards	Carbamazepine Reagent 1	No.
	Carbamazepine Reagent 2	No.
Additional information	Carbamazepine Reagent 1	-
	Carbamazepine Reagent 2	-

Section 14. Transport information

Special precautions for user : Carbamazepine Reagent 1

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.

Carbamazepine Reagent 2

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.

Section 15. Regulatory information

Canadian lists

Canadian NPRI	: **Carbamazepine Reagent 1**	**None of the components are listed.**
	Carbamazepine Reagent 2	**None of the components are listed.**
CEPA Toxic substances	: **Carbamazepine Reagent 1**	**None of the components are listed.**
	Carbamazepine Reagent 2	**None of the components are listed.**
Canada inventory	: **Carbamazepine Reagent 1**	**Not determined.**
	Carbamazepine Reagent 2	**Not determined.**

Section 16. Other information

History

Date of printing : 3/1/2024

Date of issue/Date of revision : 3/1/2024

Date of previous issue : 12/14/2020

Version : 1.04

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
HPR = Hazardous Products Regulations N/A = Not available SGG = Segregation Group

Procedure used to derive the classification

Classification	Justification
Not classified.	

Indicates information that has changed from previously issued version.

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