

**SECTION 1: IDENTIFICATION****1.1. Product Identifier**

Product Form: Mixture

Product Name: 250 mg/L Caffeine Solution

Product Code: 228-45725-06

**1.2. Intended Use of the Product**

Use of the Substance/Mixture: No use is specified

**1.3. Name, Address, and Telephone of the Responsible Party****Supplier**

Shimadzu Scientific Instruments Inc.

7102 Riverwood Dr.

Columbia, Maryland 21046

Phone #: 800.477.1227

[www.ssi.shimadzu.com](http://www.ssi.shimadzu.com)**Manufacturer**

KANTO CHEMICAL CO INC.

11-5 Nihonbashi Honcho 3-Chrome, Chuo-Ku, Tokyo 103-0023 Japan

Telephone Number: +81-3-3639-8301

Facsimile Number: +81-3-3639-9435

Email Address: [BC32@GMS.kanto.co.jp](mailto:BC32@GMS.kanto.co.jp)**1.4. Emergency Telephone Number**

Emergency Number : 410-280-7183

**SECTION 2: HAZARDS IDENTIFICATION****2.1. Classification of the Substance or Mixture**

Not classified

**2.2. Label Elements****GHS-US Labeling**

No labeling applicable

**2.3. Other Hazards**

No additional information available

**2.4. Unknown Acute Toxicity (GHS-US)**

No data available

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1. Substance**

Not applicable

**3.2. Mixture**

Name	Synonyms	Product Identifier	%	GHS-US classification
Water	AQUA / Aqua	(CAS-No.) 7732-18-5	99.975	Not classified
Caffeine	Anhydrous caffeine / 3,7-Dihydro-1,3,7-trimethyl-1H-purine-2,6-dione / 1H-Purine-2,6-dione, 3,7-dihydro-1,3,7-trimethyl- / Theophylline, 7-methyl / 1,3,7-Trimethyl-2,6-dioxopurine / 1,3,7-Trimethylxanthine / Xanthine, 1,3,7-trimethyl / CAFFEINE / Coffeine base / 1,3,7-Trimethyl-1H-purine-2,6(3H,7H)-dione	(CAS-No.) 58-08-2	0.025	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Comb. Dust

Full text of H-phrases: see section 16

**SECTION 4: FIRST AID MEASURES****4.1. Description of First-aid Measures****First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).**First-aid Measures After Inhalation:** Not expected to present a significant inhalation hazard under anticipated conditions of normal use.**First-aid Measures After Skin Contact:** Not expected to require first aid measures.**First-aid Measures After Eye Contact:** Not expected to require first aid measures.**First-aid Measures After Ingestion:** Rinse mouth. Do not induce vomiting.

# 250 mg/L Caffeine Solution

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## 4.2. Most Important Symptoms and Effects Both Acute and Delayed

**Symptoms/Injuries:** Not expected to present a significant hazard under anticipated conditions of normal use.

**Symptoms/Injuries After Inhalation:** None expected under normal conditions of use.

**Symptoms/Injuries After Skin Contact:** None expected under normal conditions of use.

**Symptoms/Injuries After Eye Contact:** None expected under normal conditions of use.

**Symptoms/Injuries After Ingestion:** None expected under normal conditions of use.

**Chronic Symptoms:** None expected under normal conditions of use.

## 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** None.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Use only as directed.

#### 6.1.1. For Non-Emergency Personnel

**Protective Equipment:** Not required.

**Emergency Procedures:** None.

#### 6.1.2. For Emergency Personnel

**Protective Equipment:** Not required.

**Emergency Procedures:** None.

### 6.2. Environmental Precautions

The product does not pose a significant hazard to the environment.

### 6.3. Methods and Materials for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal.

### 6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Precautions for Safe Handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible Materials:** Water reactive materials.

### 7.3. Specific End Use(s)

No use is specified

# 250 mg/L Caffeine Solution

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

### 8.2. Exposure Controls

Appropriate Engineering Controls	: Ensure all national/local regulations are observed.
Personal Protective Equipment	: Not required for normal conditions of use.
Materials for Protective Clothing	: Not required for normal conditions of use.
Hand Protection	: Not required for normal conditions of use.
Eye and Face Protection	: Not required for normal conditions of use.
Skin and Body Protection	: Not required for normal conditions of use.
Respiratory Protection	: Not required for normal conditions of use.
Other Information	: When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: No data available
Odor	: No data available
Odor Threshold	: No data available
pH	: No data available
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: No data available
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20°C	: No data available
Relative Density	: No data available
Solubility	: No data available
Partition Coefficient: N-Octanol/Water	: No data available
Viscosity	: No data available

### 9.2. Other Information

No additional information available

## SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.
- 10.5. Incompatible Materials:** Water reactive materials.
- 10.6. Hazardous Decomposition Products:** None.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on Toxicological Effects

Acute Toxicity: Not classified

Caffeine (58-08-2)	
LD50 Oral Rat	367 mg/kg (Species: Wistar)
LC50 Inhalation Rat	4.1 mg/l/4h

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

# 250 mg/L Caffeine Solution

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**Carcinogenicity:** Not classified

**Caffeine (58-08-2)**

**IARC group**

3

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** None expected under normal conditions of use.

**Symptoms/Injuries After Skin Contact:** None expected under normal conditions of use.

**Symptoms/Injuries After Eye Contact:** None expected under normal conditions of use.

**Symptoms/Injuries After Ingestion:** None expected under normal conditions of use.

**Chronic Symptoms:** None expected under normal conditions of use.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

**Ecology - General** : Not classified.

**Caffeine (58-08-2)**

**LC50 Fish 1**

151 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

**12.2. Persistence and Degradability** No additional information available

### 12.3. Bioaccumulative Potential

**Caffeine (58-08-2)**

**Log Pow**

-0.07

**12.4. Mobility in Soil** No additional information available

### 12.5. Other Adverse Effects

**Other Information** : The product does not pose a significant hazard to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste Treatment Methods

**Waste Disposal Recommendations:** Dispose of contents/container in accordance with local, regional, national, and international regulations.

## SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

**14.1. In Accordance with DOT** Not regulated for transport

**14.2. In Accordance with IMDG** Not regulated for transport

**14.3. In Accordance with IATA** Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### 15.1. US Federal Regulations

**Caffeine (58-08-2)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

**Water (7732-18-5)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

**15.2. US State Regulations** Neither this product nor its chemical components appear on any US state lists, or its chemical components are not required to be disclosed.

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Date of Preparation or Latest Revision** : 01/11/2019

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

### GHS Full Text Phrases:

Acute Tox. 4 (Inhalation:dust,mist)

Acute toxicity (inhalation:dust,mist) Category 4

Acute Tox. 4 (Oral)

Acute toxicity (oral) Category 4

# 250 mg/L Caffeine Solution

## Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Comb. Dust	Combustible Dust
H302	Harmful if swallowed
H332	Harmful if inhaled

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

SDS US (GHS HazCom)