

## MATERIAL SAFETY DATA SHEET

### Caffeine Citrate Oral Solution 20 mg/mL

Revision Date: 10-01-2007

#### SECTION 1: PRODUCT IDENTIFICATION

<b>Product Name</b>	Caffeine Citrate Oral Solution 20mg/mL, 3mL vial
<b>Common Name/Trade Name</b>	Caffeine Citrate Oral Solution 20mg/mL, 3mL vial
<b>Synonyms</b>	NA
<b>Chemical Name</b>	1,3,7-trimethylxanthine citrate
<b>Chemical Family</b>	Purine Alkaloid, Diuretic, Central Nervous System Stimulant
<b>Chemical Formula</b>	C <sub>14</sub> H <sub>18</sub> N <sub>4</sub> O <sub>9</sub>

#### SECTION 2: HAZARDOUS INGREDIENTS

CHEMICAL NAME	CAS#	%	OSHA PEL	ACGIH TLV	IDLH
Caffeine, anhydrous	58-08-2	1%	NA	NA	NA

#### SECTION 3: HAZARDS IDENTIFICATION

##### Potential Acute and Chronic Health Effects

EFFECTS OF OVER EXPOSURE: Signs and symptoms reported in the literature in preterm infants, fever, tachypnea, jitteriness, fine tremor of the extremities, hypertonia, opisthotonos, tonic-clonic movements, nonpurposeful jaw and lip movements, vomiting, hyperglycemia, elevated blood urea nitrogen, and elevated total leukocyte concentration.

#### SECTION 4: FIRST AID MEASURES

<b>Skin Exposure</b>	Flush with water.
<b>Eye Exposure</b>	Flush immediately with copious amounts of water for at least 15 minutes. Obtain emergency medical treatment.
<b>Inhalation</b>	Remove to a well ventilated area.
<b>Ingestion</b>	Obtain emergency medical treatment.

### **SECTION 5: FIRE / EXPLOSION HAZARDS & FIREFIGHTING MEASURES**

<b>Flammability of the Product</b>	NA
<b>Auto-ignition Temperature</b>	NA
<b>Flash Points</b>	NA
<b>Flammable Limits (in air by volume, %)</b>	Lower: NA                      Upper: NA
<b>Fire Extinguishing Equipment</b>	Use extinguishing agent suitable for type of surrounding fire. Water Spray: OK Foam: OK Carbon Dioxide: OK Dry Chemical: OK
<b>Unusual Fire and Explosion Hazards</b>	None
<b>Explosion Hazards in presence of Various substances</b>	NA
<b>Firefighting Procedures</b>	No special procedures identified

### **SECTION 6: SPILL AND LEAK PROCEDURES**

<b>Spills</b>	Clean area. Dispose in accordance with all applicable regulations.
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### **SECTION 7: HANDLING AND STORAGE**

<b>Work and Hygiene Practices</b>	As with all chemicals, avoid getting this product ON YOU or IN YOU. Do not eat, drink or smoke or apply cosmetics while handling the product. Wash hands thoroughly after handling.
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**Storage and Handling Practices**Keep out of reach of children. Store at controlled room temperature between 20° – 25° C ( 68°-77° F)

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**SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION****Engineering Controls**Under normal conditions of use, no special controls are required.

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**Personal Protection****Respiratory Protection**No special requirements.

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**Eye Protection**No special requirements.

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**Hand Protection**No special requirements.

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**Body Protection**No special requirements.

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**SECTION 9: PHYSICAL / CHEMICAL PROPERTIES****Physical state and appearance**Clear, colorless solution

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**Molecular Weight**NA

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**Boiling Point**NA

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**Vapor Density (AIR=1)**NA

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**Vapor Pressure (mm Hg)**NA

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**Melting/Freezing Point**NA

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**pH**NA

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**Water Solubility**Soluble

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**Specific Gravity (Water =1)**NA

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**Water Reactivity**NA

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**Volatility**NA

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**Odor**NA

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**SECTION 10: STABILITY AND REACTIVITY**

<b>Stability</b>	This product is stable.
<b>Incompatible Temperature</b>	NA
<b>Incompatible Materials</b>	NA
<b>Conditions of Instability</b>	NA
<b>Hazardous Polymerization</b>	Will not occur
<b>Hazardous Decomposition</b>	NA
<b>Conditions to Avoid</b>	None known at this time.

**SECTION 11: TOXICOLOGICAL INFORMATION**

<b>Toxicity</b>	NA
<b>Suspected Cancer Agent</b>	No

**SECTION 12: ECOLOGICAL INFORMATION**

<b>Environmental Stability</b>	NA
<b>Ecotoxicity</b>	NA
<b>Products of Biodegradation</b>	NA
<b>Special Remarks</b>	NA

**SECTION 13: WASTE DISPOSAL**

Dispose of material according to local, state, federal and environmental disposal regulations or company operating procedures.

**SECTION 14: TRANSPORTATION INFORMATION**

<b>DOT classification</b>	NA
<b>Identification</b>	NA
<b>DOT Label(s) Required</b>	NA

**SECTION 15: REGULATORY INFORMATION**

<b>US SARA Reporting Requirements</b>	NA
<b>Federal and State Regulations</b>	NA

**SECTION 16: OTHER INFORMATION**

## DEFINITIONS OF ABBREVIATIONS USED:

<b>ACGIH</b>	American Conference of Governmental Industry Hygienists
<b>CAS</b>	Chemical Abstract Service
<b>IARC</b>	International Agency for Research on Cancer
<b>IDLH</b>	Immediately Dangerous to Life or Health Level
<b>LC<sub>50</sub></b>	Medial Lethal Concentration
<b>LD<sub>50</sub></b>	Medial Lethal Dose
<b>MSHA</b>	Mine Safety and Health Administration
<b>NA</b>	Not Available
<b>ND</b>	No Data
<b>NE</b>	Not Established
<b>NIOSH</b>	National Institute for Occupational Safety and Health
<b>NTP</b>	National Toxicology Program
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PEL</b>	Permissible Exposure Limit
<b>SARA</b>	Superfund Amendments and Reauthorization Act
<b>STEL</b>	Short Term Exposure Limit
<b>TLV</b>	Threshold Limit Value
<b>TWA</b>	Time Weighted Average

**SECTION 17: DISCLAIMER**

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