



Safety Data Sheet

Revision Date: 09/13/21

www.restek.com

2 Letter ISO country code/language code:

US/EN

P/N 601451

Rev 1

Oct 2021

1. IDENTIFICATION

Catalog Number / Product Name: Prodigy Caffeine Standard
Company: CEM Corporation
Address: 3100 Smith Farm Road
Matthews, NC. 28104
Phone#: 800-726-3331
Fax#: 704-973-2499
Emergency#: 1-800-424-9300 (CHEMTREC)
+1 703-741-5970 (Outside the US)
Email: info@cem.com
Revision Number: 2
Intended use: For Laboratory use only

2. HAZARD(S) IDENTIFICATION

Emergency Overview:

GHS Hazard Symbols:



GHS Classification: Flammable Liquid Category 2
Serious Eye Damage/Eye Irritation Category 2
Acute Toxicity - Dermal Category 4
Acute Toxicity - Oral Category 4

GHS Signal Word: Danger

GHS Hazard: Highly flammable liquid and vapour.
Harmful if swallowed or in contact with skin.
Causes serious eye irritation.

GHS Precautions:

Safety Precautions: Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilation and lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wash hands and skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.

First Aid Measures: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
IF ON SKIN: Wash with plenty of soap and water.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Call a POISON CENTER or doctor/physician if you feel unwell.
Specific measures see section 4.
Rinse mouth.
If eye irritation persists: Get medical advice/attention.
Wash contaminated clothing before reuse.
In case of fire: Use extinguishing media in section 5 for extinction.

Storage: Keep container tightly closed.
Store in a well-ventilated place. Keep cool.

Disposal: Dispose of contents/container according to section 13 of the SDS.

Single Exposure Target Organs: No data available

Repeated Exposure Target Organs: No data available

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS #	EINEC #	% Composition
water	7732-18-5	231-791-2	69.93
acetonitrile	75-05-8	200-835-2	29.97
caffeine	58-08-2	200-362-1	0.1

4. FIRST-AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. Remove to fresh air.

Eyes: None expected to be needed, however, use an eye wash to remove a chemical from your eye regardless of the level of hazard. Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

Skin Contact: Wash with soap and water. Wash with soap and water. Remove contaminated clothing, launder immediately, and discard contaminated leather goods. Get medical attention immediately.

Ingestion: No hazard in normal industrial use. Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this SDS. Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this SDS.

5. FIRE- FIGHTING MEASURES

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water may be ineffective but water spray can be used to extinguish a fire if swept across the base of the flames. Water can absorb heat and keep exposed material from being damaged by fire.

Fire and/or Explosion Hazards: Vapors may be ignited by heat, sparks, flames or other sources of ignition at or above the low flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back.

Fire Fighting Methods and Protection: Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Use methods for the surrounding fire.

Hazardous Combustion Products: None Known

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment: Exposure to the spilled material may be severely irritating or highly toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

Methods for Clean-up: Absorb spill with inert material (e.g., dry sand or earth), then place in a

chemical waste container Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

7. HANDLING AND STORAGE

Handling Technical Measures and Precautions: Highly toxic or corrosive material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Use spark-proof tools and explosion-proof equipment

Storage Technical Measures and Conditions: Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

United States:

Chemical Name	CAS No.	IDLH	ACGIH STEL	ACGIH TLV-TWA	OSHA Exposure Limit
water	7732-18-5	Not established	None Known	Not established	No data available
acetonitrile	75-05-8	137 ppm IDLH	None Known	20 ppm TWA	40 ppm TWA; 70 mg/m3 TWA

Personal Protection:

Engineering Measures:

Local exhaust ventilation is recommended when generating excessive levels of vapours from handling or thermal processing.

Respiratory Protection:

Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms. No respiratory protection required under normal conditions of use.

Eye Protection:

Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses.

Skin Protection:

Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work

Medical Conditions Aggravated By Exposure: No medical conditions affected by exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance, color:	No data available
Odor:	Mild
Physical State:	No data available
pH:	Not applicable
Vapor Pressure:	No data available
Boiling Point:	81.6 °C at 1013.25 hPa (ECHA_API) 100 °C Boiling Point
Flash Point:	43
Flammability:	Highly Flammable
Upper Flammable/Explosive Limit, % in air:	16
Lower Flammable/Explosive Limit, % in air:	4.4
Autoignition Temperature:	No data available deg C
Decomposition Temperature:	No data available
Evaporation Rate:	No data available
Odor Threshold:	No data available
Solubility:	Not determined
Partition Coefficient: n-octanol in water:	No data available
VOC % by weight:	29.97
Molecular Weight:	No data available

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to Avoid: None known.

Materials to Avoid / Chemical Incompatibility: None Known

Hazardous Decomposition Products: None Known

11. TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation, Skin Contact, Eye Contact, Ingestion
Target Organs Potentially Affected By Exposure: Liver, Cardiovascular System, Central nervous system stimulation, Respiratory Tract
Chemical Interactions That Change Toxicity: None Known

Immediate (Acute) Health Effects by Route of Exposure:

Inhalation Irritation: No hazard in normal industrial use.
Skin Contact: No hazard in normal industrial use.
Eye Contact: No hazard in normal industrial use.
Ingestion Irritation: No hazard in normal industrial use.
Ingestion Toxicity: No hazard in normal industrial use.

Long-Term (Chronic) Health Effects:

Carcinogenicity: No data.
Reproductive and Developmental Toxicity: No data available to indicate product or any components present at greater than 0.1% may cause birth defects. Upon prolonged and/or repeated exposure, no hazard in normal industrial use. Harmful! Can cause systemic damage upon prolonged and/or repeated exposure (see "Target Organs")
Inhalation:
Skin Contact: Unlikely to cause irritation even on repeated contact.

Component Toxicological Data:

NIOSH:

Chemical Name	CAS No.	LD50/LC50
Acetonitrile	75-05-8	Dermal LD50 Rabbit >2000 mg/kg; Inhalation LC50 Rat 26.8 mg/L 4 h; Oral LD50 Rat 160 mg/kg
Water	7732-18-5	Oral LD50 Rat >90 mL/kg

Component Carcinogenic Data:

OSHA:

Chemical Name	CAS No.
No data available	

ACGIH:

Chemical Name	CAS No.	
Acetonitrile	75-05-8	A4 - Not Classifiable as a Human Carcinogen

NIOSH:

Chemical Name	CAS No.
No data available	

NTP:

Chemical Name	CAS No.
No data available	

IARC:

Chemical Name	CAS No.	Group No.

12. ECOLOGICAL INFORMATION

Overview: Moderate ecological hazard. This product may be dangerous to plants and/or wildlife.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Ecological Toxicity Data: No data available

13. DISPOSAL CONSIDERATIONS

Waste Description of Spent Product: Spent or discarded material is a hazardous waste. Mixing spent or discarded material with other materials may render the mixture hazardous. Perform a hazardous waste determination on mixtures.

Disposal Methods: Dispose of by waste water treatment following Federal, State, Local, or Provincial regulations.
Waste Disposal of Packaging: Comply with all Local, State, Federal, and Provincial Environmental Regulations.

14. TRANSPORTATION INFORMATION

United States:
DOT Proper Shipping Name: DOT Not Regulated
UN Number: Not regulated
Hazard Class: Not applicable
Packing Group: Not applicable

International:
IATA Proper Shipping Name: IATA Not Regulated
UN Number: Not regulated.
Hazard Class: Not applicable
Packing Group: Not applicable

Marine Pollutant: No

15. REGULATORY INFORMATION

United States:

Chemical Name	CAS#	CERCLA	SARA 313	SARA EHS 313	TSCA
water	7732-18-5	-	-	-	X
acetonitrile	75-05-8	X	X	-	X

The following chemicals are listed on CA Prop 65:

Chemical Name	CAS #	Regulation
---------------	-------	------------

State Right To Know Listing:

Chemical Name	CAS#	New Jersey	Massachusetts	Pennsylvania	California
water	7732-18-5	-	-	-	-
acetonitrile	75-05-8	X	X	X	X
caffeine	58-08-2	-	-	-	-

16. OTHER INFORMATION

Prior Version Date: 09/08/21
Other Information: Any changes to the SDS compared to previous versions are marked by a vertical line in front of the concerned paragraph.
References: No data available
Disclaimer: IMPORTANT: WHILE THE DESCRIPTIONS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU PERFORM AN ASSESSMENT TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED, DATA OR INFORMATION SET FORTH. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, OR DATA PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, THE DESCRIPTIONS, DATA AND INFORMATION FURNISHED HEREUNDER ARE GIVEN GRATIS. NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DATA AND INFORMATION GIVEN ARE ASSUMED. ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.