

SAFETY DATA SHEET - Caffeine Anhydrous

Section 1 – Product Information

- **Product Name:** Caffeine
- **Product Number:** CAS#: 58-08-2
- **Identified Uses:** Laboratory chemical, Manufacturing
- **Company name:** Albochemicals LLC
- **Company website:** <http://www.albochem.com>
- **Address:** 8 The Green #10911 Dover, DE 19901
- **Email:** onlinestore@albochem.com

Section 2 - Hazards Identification

2.1 Classification of the substance or mixture

- GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
- Combustible dust
- Acute toxicity, Oral (Category 4), H302
- Short-term (acute) aquatic hazard (Category 3), H402

2.2 GHS Label elements, including precautionary statements

- **Pictogram:** Exclamation mark (GHS07)
- **Signal word:** Warning
- **Hazard statements:**
 - H302: Harmful if swallowed.
 - H402: Harmful to aquatic life.
- **Precautionary statements:**
 - **P264:** Wash skin thoroughly after handling.
 - **P270:** Do not eat, drink or smoke when using this product.
 - **P301+P312+P330:** IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
 - P302+P352: If on skin: Wash with soap and water.
 - P304+P340+P312: If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
 - P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
 - P332+P313: If skin irritation occurs: Get medical advice/attention.
 - P337+P313: If eye irritation persists: get medical advice/attention.

- P362: Take off contaminated clothing and wash before reuse.
- P403+P233: Store in a well ventilated place. Keep container tightly closed.
- P405: Store locked up.
- P501: Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC)

May form explosible dust-air mixture if dispersed.

Section 3 - Composition/Information on Ingredient

Composition	Formula	CAS Number	Inactive ingredients
Caffeine free base	C ₈ H ₁₀ N ₄ O ₂	58-08-2	N/A

Section 4 - First Aid Measures

General advice: Consult a physician. Move out of the dangerous area.

If inhaled: If breathed in, move the person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Flush eyes with water as a precaution. Remove contact lenses.

If swallowed: After swallowing: immediately make the victim drink water (two glasses at most). Consult a physician.

Section 5 - Firefighting Measures

- **Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- **Special hazards:** Carbon oxides, nitrogen oxides (NO_x). Combustible. Risk of dust explosion. Development of hazardous combustion gases or vapours possible in the event of fire.
- **Advice for firefighters:** Wear self-contained breathing apparatus for fire fighting if necessary.

Section 6 - Accidental Release Measures

- **Personal precautions:** Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.
- **Environmental precautions:** Do not let the product enter drains. Cover drains.
- **Methods for cleanup:** Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

Section 7 - Handling and Storage

- **Precautions for safe handling:** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
- **Conditions for safe storage:** Storage class (TRGS 510): 11: Combustible Solids

Section 8 - Exposure Controls / PPE

- **Engineering Controls:** Safety shower and eye bath.
- **Respiratory:** Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- **Hand:** Compatible chemical-resistant gloves.
- **Eye:** Chemical safety goggles.
- **General Hygiene:** Wash thoroughly after handling. Wash contaminated clothing before reuse.

Section 9 - Physical/Chemical Properties

Property	Value
Appearance	White powder
Molecular Weight	194.19 g/mol
Melting Point	235°C to 238°C
pH/BP/Flash Point/Density	N/A

Section 10 - Stability and Reactivity

- **Stability:** Stable under normal conditions. Avoid oxidizing agents.
- **Reactivity:** The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
- **Hazardous Decomposition:** Toxic fumes of carbon monoxide, carbon dioxide.

Section 11 - Toxicological Information

Acute toxicity: LD50 Oral - Rat - male and female - 367.7 mg/kg (OECD Test Guideline 401).
LC50 Inhalation - Rat - male and female - 4 h - 4.94 mg/l - aerosol. LD50 Dermal - Rat - > 2,000 mg/kg.

Skin/Eye irritation: No skin or eye irritation (Rabbit).

Carcinogenicity: Not identified as a probable, possible, or confirmed human carcinogen by IARC, NTP, or OSHA.

Section 12 - Ecological Information

Toxicity to fish: static test LC50 - Leuciscus idus (Golden orfe) - ca. 87 mg/l - 96 h
Toxicity to daphnia: static test EC50 - Daphnia magna (Water flea) - 182 mg/l - 48 h

Section 13 - Disposal Considerations

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Section 14 - Transport Information

DOT (US) / IMDG / IATA: Not dangerous goods.

Section 15 - Regulatory Information

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16 - Other Information

DISCLAIMER: For R&D use only. Not for food, drug or household use.