

Natural Caffeine (CAS number- 58-08-2)

TAJNW-TTVUMWQ487

Taj Active Pharmaceuticals Ingredients (**CNS STIMULANT**)

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Active Pharmaceutical Ingredients
TAJ PHARMACEUTICALS LIMITED INDIA



Raw Material / Chemicals Index

Natural Caffeine

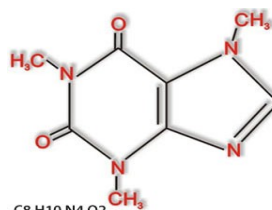
CAS NO. 58-08-2

Natural Caffeine Features



Each Batch complies with the specifications as described in the latest edition/revisions of the British Pharmacopoeia (BP), German Pharmacopoeia (DAB), European Pharmacopoeia (EP), U.S. Food Chemicals Codex (FCC), Japanese Pharmacopoeia (JP), United States Pharmacopoeia (USP), and all applicable good manufacturing practices, laws and regulations

Category :Central Nervous System Stimulant



C₈ H₁₀ N₄ O₂
Mol. Wt. 194.2
1,3,7-Trimethylxanthine

SPECIFICATIONS

Origin	Natural Sources
Description	White Crystalline Powder
Taste & Odor	Bitter, Odor less
Identification	Passes Test
Solubility	Passes Test
Clarity & color	Passes Test
Appearance in H3PO4	Passes Test
Acidity or Alkalinity	Passes Test
Readily carbonizable substances	Passes Test
Other Alkaloids / Related substance	Passes Test

LIMITS

Melting Range, C	235.5-237.5	235.0-237.5
Loss on drying, % w/w	< 0.25	Max. 0.25
Insoluble, mg/kg.	< 50	Max. 50
Heavy Metals, (as Pb), mg/kg.	< 5	Max. 10
Iron, mg/kg.	< 10	Max. 10
Lead, mg/kg.	< 1	Max. 1
Mercury, mg/kg.	NIL	Max. 0.5
Chlorides, mg/kg.	< 100	Max.150
Sulfate, mg/kg.	< 100	Max. 240
Arsenic, mg/kg.	< 1	Max. 3
Sulphated Ash / Residue on Ignition , % w/w	< 0.1	Max. 0.1
Ph value	Neutral	5.5-6.5
Organic volatile impurities	Passes Test	
Assay, % w/w	99.0-100.5	98.5-101.0
Purity	< 99.5%	

Product Identification

Synonyms: 1,3,7-trimethylxanthine

CAS No.: 58-08-2 Molecular

Weight: 194.19

Chemical Formula: C8H10N4O2

HS Codes: 29 39 30 00

Composition/Information on Ingredients

Ingredient : Caffeine

CAS No : 58-08-2

Percent : 100%

Hazardous : YES

Hazards Identification

Emergency Overview

WARNING! HARMFUL IF SWALLOWED OR INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.POSSIBLE BIRTH DEFECT HAZARD. MAY CAUSE BIRTH DEFECTS BASED ON ANIMAL DATA.

Health Rating: 2 - Moderate

Flammability Rating : 1 - Slight

Reactivity Rating: 0 - None

Contact Rating: 1 - Slight

Lab Protective Equip : GOGGLES; LAB COAT

Storage Color Code : Orange (General Storage)

POTENTIAL HEALTH EFFECTS

Inhalation:

Inhalation of dust may irritate the mucous membranes and respiratory tract. High concentrations may produce effects paralleling ingestion.

Ingestion:

Toxic. The adult mean lethal dose is approximately 10 gm. Large doses may produce palpitation, excitement, insomnia, dizziness, headache and vomiting.

Skin Contact:

Causes irritation to skin. Symptoms include redness, itching, and pain.

Eye Contact:

Causes irritation, redness, and pain.

Chronic Exposure:

Excessive use of caffeine may lead to digestive disturbances, constipation, palpitations, shortness of breath and depressed mental states.Possible teratogen. May cause congenital malformation in the fetus.

First Aid Measures

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact:

Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Fire Fighting Measures**Fire:**

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

Explosion:

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Fire Extinguishing Media:

Water spray, dry chemical, alcohol foam, or carbon dioxide.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode

Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product

Exposure Controls/Personal Protection**Airborne Exposure Limits:**

None established.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Personal Respirators (NIOSH Approved):

For conditions of use where exposure to the dust or mist is apparent, a half-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Physical and Chemical Properties

Appearance	White powder.
Odor	Odorless.
Solubility	1 gm in 46 mls water.
Specific Gravity	1.23
pH	5.5-6.5 (1% aqueous solution)
% Volatiles by volume @ 21C (70F)	0
Boiling Point	178°C (sublimes)
Melting Point	235°C - 237.5°C (460F)
Vapor Density (Air=1)	No information found.
Vapor Pressure (mm Hg)	No information found.
Evaporation Rate (BuAc=1)	No information found.

Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Burning may produce carbon monoxide, carbon dioxide, nitrogen oxides.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Incompatible with strong oxidizers, iodine silver salts, tannins, and with strong solutions of caustic alkalis.

Conditions to Avoid:

Heat, flames, ignition sources and incompatibles.

Toxicological Information

Toxicological Data:

Oral rat LD50: 192 mg/kg. Investigated as a tumorigen, mutagen, reproductive effector.

Reproductive Toxicity:

May cause teratogenic effects.

-----\Cancer Lists\-----

Ingredient	Known	Anticipated	IARC Category
Caffeine (58-08-2)	NO	NO	3

Ecological Information

Environmental Fate:

When released into the soil, this material may biodegrade to a moderate extent. When released into water, this material may biodegrade to a moderate extent. This material is not expected to significantly bioaccumulate.

Environmental Toxicity:

No information found

Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Transport Information**D.O.T.****Shipping Name :** TOXIC SOLID, ORGANIC, N.O.S.(CAFFEINE)**Hazard Classification :** ORM - E**Identification No. :** NA 9188**Other Shipping Regulations :** None ; no limit with passenger or cargo aircraft**Exception :** None .**Specific Requirement :** 173.1300 in Hazardous Material Regulation of the Department of Transportation (1981)**Regulatory Information****Australian Hazchem Code :** No information found**Poison Schedule :** No information found**WHMIS :** This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.**Product Use**

Central stimulant , veterinary-cardiac and respiratory stimulant and diuretic .

We have experience in Exporting and Manufacturing of all Countries and Overseas medicines in quick reliable manner and we are very interested to start collaboration with your company or organisation!



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