



## Section 1 Identification

**Product name:** CAFFEINE

**Company information:**

**Name:** CSPC INNOVATION PHARMACEUTICAL CO., LTD.

**Address:** No. 36 Fuqiang Western Road, Luancheng County ,Shijiazhuang City, Hebei Province, China

**Zip Code:** 051430

**Telephone :** +86 311 85408700

**Fax :** +86 311 85409463

**Emergency Phone:** +86 311 85408723

**Recommended use:** active pharmaceutical ingredient , food additive

## Section2 Hazards Identification

**Classification of the substance or mixture**

**GHS Classification in accordance with 29 CFR 1910 ( OSHA HCS)**

Acute toxicity, Oral (Category 4), H302

**GHS Label elements, including precautionary statement**

**Hazard pictograms:**



GHS07

**Signal word:** Warning

**Hazard statements:**

H302 Harmful if swallowed

**Precautionary statements:**

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P301+P312 IF SWALLOWED: Call a POIZON CENTER or doctor/physician if you feel unwell.



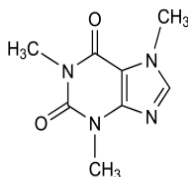
石药集团新诺威制药股份有限公司  
CSPC INNOVATION PHARMACEUTICAL CO., LTD.

P330 Rinse mouth  
P501 Dispose of contents/container

**Hazards not otherwise classified (HNOC) or not covered by GHS-none**

### Section3 Composition/Information on Ingredients

**Product name:** CAFFEINE  
**Synonyms:** CAFFEINE ; 3,7-Dihydro-1,3,7-trimethyl-1H-purine-2,6-dione  
**CAS No.:** 58-08-2  
**EC No:** 200-362-1  
**Index-No.:** 613-086-00-5  
**Classification:** Xn; R22  
**Chemical formula:** C<sub>8</sub>H<sub>10</sub>N<sub>4</sub>O<sub>2</sub>  
**Molecular Weight:** 194.2g/mol  
**Structure formula:**



### Section 4 First-aid Measures

#### Description of first aid measures

##### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

##### If inhaled

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

##### In case of skin contact

Remove affected clothing and wash all exposed skin area with mild soap and plenty of water, followed by warm water rinse. Consult a physician.

##### In case of eye contact

Rinse immediately with plenty of water. Obtain medical attention if pain, blinking, tears or redness persists.



**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most important symptoms and effects, both acute and delays**

The most important known symptoms and effects are described in the labeling and/or in section 11.

**Indication of any immediate medical attention and special treatment needed**

No data available.

In case of reactions described in hazards identification or other severe, immediate or persisting symptoms seek medical advice and call the nearest poison centre. Show the label and this safety data sheet.

## Section 5 Fire-fighting Measures

**Suitable extinguishing media**

Water spray, alcohol-resistant foam, Carbon dioxide, Dry powder

**Surrounding fires**

Use water spray or fog for cooling exposed containers.

**Protection against fire**

Do not enter fire area without proper protective equipment, including respiratory protection.

**Special hazards arising from the substance or mixture**

No data available.

## Section 6 Accidental Release Measures

**General precautions**

Remove ignition sources. Evacuate area.

**Personal precautions**

Use personal protective equipment. Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection.

**Clean up methods**

Clean spills promptly. To clean the floor and all objects contaminated by this material, use: sodium hypochlorite solution. Ensure adequate ventilation.



## Section 7 Handling and Storage

### Precautions for safe handling:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

### Storage:

Keep container tightly closed in a natural temperature, well ventilated place.

### Storage - away from:

All heat sources, including direct sunlight. Open flame. Sources of ignition. Sparks. Incompatible materials, see §10.

### Control of environmental exposure

Do not let product enter drains.

## Section 8 Exposure Controls/Personal Protection

### Engineering measures:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

### Personal protection:

- Respiratory protection:      Wear approved mask. In case of insufficient ventilation, wear suitable respiratory equipment.
- Hand protection:            Wear suitable gloves resistant to chemical penetration.
- Skin protection:             Wear suitable protective clothing.
- Eye protection:              Chemical goggles or safety glasses.

### Control of environmental exposure

Do not let product enter drains.

## Section 9 Physical and Chemical Properties

### Information on basic physical and chemical properties

- a) Appearance:                White or almost white



石药集团新诺威制药股份有限公司  
CSPC INNOVATION PHARMACEUTICAL CO., LTD.

Powder (20 °C)

- |  |   |
|--|---|
| b) Odor:   | odorless  |
| c) Odor Threshold:                                 | no data available   |
| d) pH:   | 5.5-6.5 at 10g/L at 20°C  |
| e) Melting point [°C]:                             | 234-239   |
| f) Initial boiling point and boiling range:        | no data available   |
| g) Flash point:                                    | no data available   |
| h) Evaporation rate:                               | no data available   |
| i) Flammability(solid , gas)                       | no data available   |
| j) Upper/lower flammability<br>or explosive limits | no data available   |
| k) Vapour pressure                                 | no data available   |
| l) Vapour density                                  | no data available   |
| m) Relative density                                | no data available   |
| n) Solubility                                      | Sparinly soluble in water, freely soluble in boiling<br>water, slightly soluble in ethanol. It dissolves in<br>concentrated solutions of alkali benzoates or salicylates. |
| o) Log P octanol / water at 20°C                   | -0.070  |
| p) Auto-ignition temperature [°C]                  | 540-600   |
| q) Decomposition temperature                       | no data available   |
| r) Viscosity                                       | no data available   |
| s) Explosive properties                            | no data available   |
| t) Oxidizing properties                            | no data available   |

## Section 10 Stability and Reactivity

- |   |                                 |
|---|---------------------------------|
| <b>Specific Concentration Limit(s):</b> | no data available               |
| <b>Stability and reactivity:</b>        | Stable under normal conditions. |
| <b>Materials to avoid:</b>              | Oxidizing agent.                |



<b>Conditions to avoid:</b>	Heat. Light.
<b>Hazardous decomposition products:</b>	Carbon monoxide. Carbon dioxide. Nitrogen oxides. When heated to decomposition, emits dangerous fumes.
<b>Hazardous reactions:</b>	None under normal conditions.
<b>Hazardous polymerization:</b>	Will not occur.

## Section 11 Toxicological Information

### Information on toxicological effects

#### Acute toxicity

<b>Rat oral LD50 [mg/kg]:</b>	469.9
<b>Rabbit oral LD50 [mg/kg]:</b>	No data available.
<b>Mouse oral LD50 [mg/L/4h]:</b>	No data available.

#### Skin corrosion/irritation

Skin –rabbit Result: No skin irritation (OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eyes –rabbit Result: No eye irritation (OECD Test Guideline 405)

#### Respiratory or skin sensitization

-mouse Result: Did not cause sensitization on laboratory animals.

#### Carcinogenicity

<b>IARC:</b>	3 -Group 3: Not classifiable as to its carcinogenicity to humans (Caffeine).
<b>ACGIH:</b>	No component of this product presents at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
<b>NTP:</b>	No component of this product presents at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
<b>OSHA:</b>	No component of this product presents at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### Reproductive toxicity

No data available.

#### Specific target organ toxicity -single exposure



No data available.

**Specific target organ toxicity -repeated exposure**

No data available.

**Aspiration hazard**

No data available.

**Additional Information**

RTECS: EV6475000

## Section 12 ECOLOGICAL INFORMATION

<b>Ecological effects information:</b>	May be toxic to aquatic life.
<b>LC50-96 Hour - fish [mg/L]:</b>	87
<b>EC50-48 Hour-Daphnia magna [mg/L]:</b>	182
<b>IC50-72h-Algae [mg/L]:</b>	>100
<b>Biodegradation [%]:</b>	Biodegradable.
<b>Persistence - degradability:</b>	No data available.
<b>Log P octanol / water at 20°C:</b>	-0.070
<b>Bioaccumulative potential:</b>	No data available.

## Section 13 Disposal Considerations

**Waste treatment methods**

**Product**

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. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

General: Dispose of this material and its container at special waste collection point. Dispose in a safe



石药集团新诺威制药股份有限公司  
CSPC INNOVATION PHARMACEUTICAL CO., LTD.

manner in accordance with local/national regulations.

### Section 14 Transport Information

**DOT (US)**

Not dangerous goods.

**IMDG**

Not dangerous goods.

**IATA**

Not dangerous goods.

### Section 15 Regulatory Information

Symbol(s) :	Xn:	Harmful.
Risk Phrases:	R22:	Harmful if swallowed.
Safety Phrases:	S22:	Do not breath dust
	S36/37 :	Wear suitable protective clothing and gloves.
	S45:	In case of accident or if you feel unwell, seek medical advice immediately (show the label when possible).

### Section 16 Other Information

Further information :                      Revision-See:\*

MSDS Revision Date: 2015.03.27

\*: This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.