



HEBEI GUANGXIANG PHARMACEUTICAL CO., LTD.

The east of the Jingliu Road, Lingang West Economic and Technological Development Zone,
Cangzhou City, Hebei Province.

June 1st, 2020

QA Department of

HEBEI GUANGXIANG PHARMACEUTICAL CO., LTD.

质量管理部

Material Safety Data Sheet

Caffeine

Section 1 - Chemical Product and Company Identification

1.1 Product Name: Caffeine

CAS#: 58-08-2

Synonym: 3,7-Dihydro-1,3,7-trimethyl-1H-purine-2,6-dione

Chemical Formula: $C_8H_{10}N_4O_2$

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant identified uses: For research use only, not for human or veterinary use.

1.3 Details of the Supplier of the Safety Data Sheet:

Company Name: Hebei Guangxiang Pharmaceutical Co., Ltd.

Address: East of Jingliu Road, Lingang Chemical Industrial Park, Cangzhou City, Hebei Province.

Tel: 86- 317-5603098

Section 2 - Composition and Information on Ingredients

Name	CAS #	Concentration	EC No.	Chemical characterization
Caffeine	58-08-2	100%	200-362-1	Substance

Section 3 - Hazards Identification

2.1 Classification of the Substance or Mixture:

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

Acute toxicity, Oral (Category 4), H302

2.2 Label Elements:



GHS Signal Word: Warning

GHS Hazard Phrases:

H302 Harmful if swallowed.

Precautionary statement(s)

P264 Wash skin thoroughly after handling.

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

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

P330 Rinse mouth.

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS – none

Section 4 - First Aid Measures

4.1 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

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

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

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

no data available

Section 5 - Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

no data available

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

no data available

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas.

Ensure adequate ventilation. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13

Section 7 - Handling and Storage

7.1 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.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8 - Exposure Controls and Personal Protection

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved

under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level

protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

Section 9 - Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

a) Appearance	Form: powder Colour: white
b) Odour	odourless
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	Melting point/range: 234-239°C
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 or explosive limits	no data available
k) Vapour pressure	20 hPa (15 mmHg) at 89 °C (192 °F)
l) Vapour density	no data available
m) Relative density	1.230 g/cm ³ at 18 °C (64 °F)
n) Water solubility	18.7 g/l at 16 °C (61 °F)
o) Partition coefficient: n-octanol/water	log Pow: -0.091 at 23 °C (73 °F)
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties	no data available
t) Oxidizing properties	no data available

9.2 Other safety information

Bulk density	220 kg/m ³
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Dissociation constant

10.4 at 40 °C (104 °F)

Section 10 - Stability and Reactivity

10.1 Reactivity: No data available.

10.2 Stability: Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

Section 11 - Toxicological Information

Information on toxicological effects

Acute toxicity:

LD50 Oral - rat - male and female - 367.7 mg/kg (OECD Test Guideline 401)

LC50 Inhalation - rat - male and female - 4.94 mg/l (Calculation method)

LD50 Dermal - rat - male and female - > 2,000 mg/kg

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 sensitisation

- mouse

Result: Did not cause sensitisation on laboratory animals.

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

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Liver - Irregularities - Based on Human Evidence

Liver - Irregularities - Based on Human Evidence

Section 12 - Ecological Information

12.1 Toxicity

Toxicity to fish No data available.

Toxicity to daphnia and No data available.
other aquatic
invertebrates

Toxicity to algae No data available.

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

Section 13 - Disposal Considerations

13.1 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.

Section 14 - Transport Information

14.1 LAND TRANSPORT

Land transport

-Shipping Name: ALKALOIDS, SOLID, N.O.S. (Caffeine)

-UN No.: Not applicable

-ADR/RID class: Not applicable

ADR/RID Packing group: Not applicable

-*ADR Labelling: Not applicable

Maritime transport

-Shipping Name: ALKALOIDS, SOLID, N.O.S. (Caffeine)

-UN No.: Not applicable

-IMDG Class: Not applicable

- IMDG Packing group: Not applicable

- *IMDG Labelling: Not applicable

Air transport

- Shipping Name: ALKALOIDS, SOLID, N.O.S. (Caffeine)

- UN No.: Not applicable

- IATA Class or division: Not applicable

IATA Packing group: Not applicable

- *IATA Labelling: Not applicable

Section 15 - Regulatory Information

General Information No data Available

Poisons(Aust) No Scheduled

Environmental Protection Authority (New Zealand)

Hazardous Substance and New Organisms Amendment Act 2015

Approval Code HSR002578

National/Regional Inventories

Australia(AICS) Listed

Canada(DSL) Not Determined

Canada(NDSL) Not Determined

China(IECSC)	Not determined
Europe(EINECS)	200-362-1
Europe(REACH)	Not determined
Japan(ENCS/METI)	Not determined
Korea(KECI)	Not determined
Malaysia(EHS Register)	Not determined
New Zealand(NZLoC)	Listed
Philippines(PICCS)	Not determined
Switzerland(Giftliste 1)	Not determined
Switzerland(Inventory of Notified substances)	Not determined
Taiwan(NCSR)	Not determined
USA(TSCA)	Not determined

Section 16 - Other Information

No data available.

THIS MSDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS MSDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS

Please read all labels carefully before using product.