

SAFETY DATA SHEET

CAFFEINE ANHYDROUS 98.5- 101.0% BP,USP, EP6

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Compilation date: 08/03/2019

Revision No: 1

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: CAFFEINE ANHYDROUS 98.5- 101.0% BP,USP, EP6

CAS number: 58-08-2

EINECS number: 200-362-1

Product code: GPC5533

Synonyms: 1,3,7-TRIMETHYLYXANTHINE

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

Use of substance / mixture: PC21: Laboratory chemicals.

1.3. Details of the supplier of the safety data sheet

Company name: Atom Scientific Ltd

2b East Tame Business Park

Hyde

Manchester

SK14 4GX

Tel: 0161 366 5123

Fax: 01704 337167

Email: technical@atomscientific.com

1.4. Emergency telephone number

Emergency tel: 07833453806

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Acute Tox. 4: H302

Classification under CHIP: Xn: R22

Most important adverse effects: Harmful if swallowed.

2.2. Label elements

Label elements under CLP:

Hazard statements: H302: Harmful if swallowed.

Signal words: Warning

Hazard pictograms: GHS07: Exclamation mark



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2.3. Other hazards

Other hazards: None.

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: CAFFEINE ANHYDROUS 98.5- 101.0% BP,USP, EP6

CAS number: 58-08-2

EINECS number: 200-362-1

Contains: Formula : C₈H₁₀N₄O₂

Molecular Weight : 194.19 g/mol

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water. Consult a doctor.

Eye contact: Flush eyes with water as a precaution.

Ingestion: Never give anything by mouth to an unconscious person. Wash out mouth with water.
Consult a doctor.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. If unconscious, check for breathing and apply artificial respiration if necessary. Consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Inhalation: No data available.

Delayed / immediate effects: No data available.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: No data available.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Water spray. Alcohol resistant foam. Dry chemical powder. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Not applicable.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus.

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Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: 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

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: 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

Reference to other sections: Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: 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

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Not applicable.

7.3. Specific end use(s)

Specific end use(s): No special requirement.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

8.1. DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

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

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).

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Hand protection: Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min 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.

Eye protection: Safety glasses with side-shields. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin 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.

Environmental: Do not let product enter drains.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Powder

Colour: White

Melting point/range°C: 234 - 236.5 °C - lit

Part.coeff. n-octanol/water: log Pow: -0.091

Vapour pressure: 20 hPa at 89 °C

Relative density: 1.230 g/cm³ at 18 °C

pH: 5.5 - 6.5 at 10 g/l

9.2. Other information

Other information: Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: No data available.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: No data available.

10.4. Conditions to avoid

Conditions to avoid: No data available.

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10.5. Incompatible materials

Materials to avoid: Strong oxidising agents.

10.6. Hazardous decomposition products

Haz. decomp. products: No data available.

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD50	367.7	mg/kg
INHALATION	RAT	4H LC50	4.94	mg/l
DERMAL	RAT	LD50	> 2,000	mg/kg

Relevant hazards for substance:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	ING	Based on test data

Symptoms / routes of exposure

Skin contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Inhalation: No data available.

Delayed / immediate effects: No data available.

Other information: Not applicable.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
FISH	96H LC50	87	mg/l
DAPHNIA	48H EC50	182	mg/l
ALGAE	72H ErC50	> 100	mg/l

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

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12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: 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.

Recovery operations: Not applicable.

Disposal of packaging: Dispose of as unused product.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Specific regulations: This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and 3: H302: Harmful if swallowed.

R22: Harmful if swallowed.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.