



Caffeine Anhydrous CAS No 58-08-2	MATERIAL SAFETY DATA SHEET SDS/MSDS
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Caffeine Anhydrous

CAS-No. : 58-08-2

1.2 2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 3 Details of the supplier of the safety data sheet

Company : Quantung, Lda.
 RUA PADRE VINCENTE MARIA DA
 ROCHA 384J 3840-453 VAGOS, PORTUGAL

Telephone : +351 9621-63100

Email : info@quantung.com

1.4 Emergency telephone number

Emergency Phone # : +351 91910-8800 (9:00am - 6:00 pm) [Office hours]

SECTION 2: Hazards identification

21 1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xn Harmful R22

For the full text of the R-phrases mentioned in this Section, see Section 16.

22 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word : Warning

Hazard statement(s)
 H302 Harmful if swallowed.

Precautionary statement(s) : none

Supplemental Hazard : none

Statements

2.3 Other hazards - none

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : 1,3,7-Trimethylxanthine

Formula : C₈H₁₀N₄O₂

Molecular Weight : 194,19 g/mol

CAS-No. : 58-08-2

EC-No. : 200-362-1

Index-No. : 613-086-00-5

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
Caffeine		
CAS-No. 58-08-2	Acute Tox. 4; H302	<= 100 %
EC-No. 200-362-1		
Index-No. 613-086-00-5		

Hazardous ingredients according to Directive 1999/45/EC

Component	Classification	Concentration
Caffeine		
CAS-No. 58-08-2	Xn, R22	<= 100 %
EC-No. 200-362-1		
Index-No. 613-086-00-5		

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

SECTION 4: First aid measures

41 1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

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.

42 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

43 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

51 1 Extinguishing media

Suitable extinguishing media

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

- 52 **2 Special hazards arising from the substance or mixture**
no data available
- 53 **3 Advice for firefighters**
Wear self contained breathing apparatus for fire fighting if necessary.
- 54 **Further information**
no data available

SECTION 6: Accidental release measures

- 61 **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.
- 62 **Environmental precautions**
Do not let product enter drains.
- 63 **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.
- 64 **Reference to other sections**
For disposal see section 13.

SECTION 7: Handling and storage

- 71 **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.
- 72 **2 Conditions for safe storage, including any incompatibilities**
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
- 73 **3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

- 81 **1 Control parameters**
Components with workplace control parameters
- 82 **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.
- 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	5,5 - 6,5 at 10 g/l at 20 °C
e) Melting point/freezing point	Melting point/range: 235 - 238 °C - lit.
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 at 89 °C
l) Vapour density	no data available
m) Relative density	1,230 g/cm ³ at 18 °C
n) Water solubility	soluble
o) Partition coefficient: n-octanol/water	log Pow: -0,091 at 23 °C
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
Dissociation constant	10,4 at 40 °C

SECTION 10: Stability and reactivity

- 101 .1 Reactivity**
no data available
- 102 Chemical stability**
Stable under recommended storage conditions.
- 103 3 Possibility of hazardous reactions**
no data available
- 104 Conditions to avoid**
no data available
- 105 Incompatible materials**
Strong oxidizing agents
- 106 Hazardous decomposition products**
Other decomposition products - no data available
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 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

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.

Germ cell mutagenicity

rat

Kidney

Micronucleus test

mouse

Micronucleus test

Carcinogenicity

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Caffeine)

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

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

Liver - Irregularities - Based on Human Evidence

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish LC50 - Leuciscus idus (Golden orfe) - 87 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - 182 mg/l - 48 (DIN 38412)

Toxicity to algae static test - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201)

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

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

141	.1 UN number ADR/RID: -	IMDG: -	IATA: -
142	UN proper shipping name ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods		
143	Transport hazard class(es) ADR/RID: -	IMDG: -	IATA: -
144	Packaging group ADR/RID: -	IMDG: -	IATA: -
145	Environmental hazards ADR/RID: no	IMDG Marine pollutant: no	IATA: no
146	Special precautions for user no data available		

SECTION 15: Regulatory information

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

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

no data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.	Acute toxicity
H302	Harmful if swallowed.

Full text of R-phrases referred to under sections 2 and 3

Xn	Harmful
R22	Harmful if swallowed.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Quantung, Lda. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.quantung.com for additional terms and conditions of sale.