

MATERIAL SAFETY DATA SHEET

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Issue Date:

1- Chemical Product Information and Company Identification.

Product Name: Acetone AnStan® GC Reference standard.
Synonym: Acetone.
Product code: BS10086.
CAS Number: 67-64-1.
Company Name: Briti Scientific.
Company Address: Plot No: 78/B/13, SY-79, Phase-VI, Jeedimetla, Hyderabad- 500 055.
Telangana, India.

Section 2- Composition / Information on Ingredients.

CAS No.	Chemical Name	Mol. Formula
67-64-1.	Acetone.	C ₃ H ₆ O.

Section 3- Hazards Identification.

Classification of the substance or mixture.

Classification according to Regulation (EC) No 1272/2008.

Flammable liquids (Category 2), H225

Eye irritation (Category 2), H319

Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336

Label elements

Labelling according Regulation (EC) No 1272/2008



Hazard statement(s)

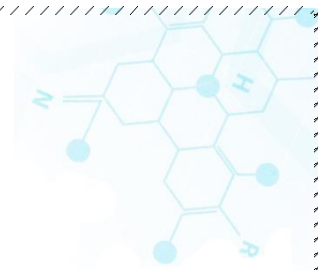
H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.



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Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use non-sparking tools.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Supplemental Hazard information (EU)

EUH066 Repeated exposure may cause skin dryness or cracking

Reduced Labelling (<= 125 ml)

Signal word Danger

Hazard statement (s) none

Precautionary statement(s) none

Supplemental Hazard information (EU)

EUH066 Repeated exposure may cause skin dryness or cracking.

Other hazards

This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

Section 4- First Aid Measures.

Description of first aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Call in physician.

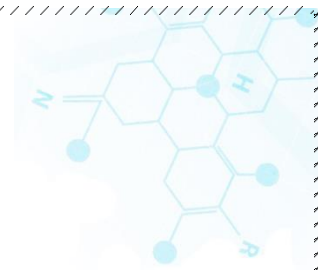
In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.





If swallowed

After swallowing: immediately make victim drink water (two glasses at most).

Consult a physician.

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.

Section 5- Fire Fighting Measures.

Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂) Foam Dry powder.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Carbon oxides

Combustible.

Pay attention to flashback.

Vapours are heavier than air and may spread along floors.

Development of hazardous combustion gases or vapours possible in the event of fire.

Forms explosive mixtures with air at ambient temperatures.

Advice for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6- Accidental Release Measures.

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Avoid substance contact.

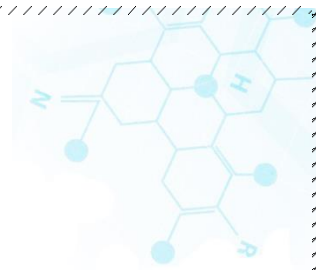
Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

Environmental precautions

Do not let product enter drains. Risk of explosion.

Methods and materials for containment and cleaning up





Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g., Chemisorb®). Dispose of properly. Clean up affected area.

Section 7- Handling and Storage.

Precautions for safe handling

Advice on safe handling

Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

Storage class

Storage class (TRGS 510): 3: Flammable liquids

Specific end use(s)

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

Section 8- Exposure Control/Personal Protection.

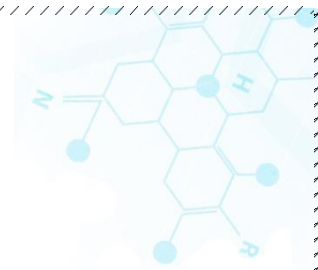
Control parameters

Ingredients with workplace control parameters

Predicted No Effect Concentration (PNEC)

Compartment	Value
Soil	33,3 mg/kg
Water	1,06 mg/l
Fresh water	10,6 mg/l
Sea sediment	3,04 mg/kg
Fresh water sediment	30,4 mg/kg
Onsite sewage treatment plant	100 mg/l





Exposure controls

Personal protective equipment

Eye/face protection

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

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Full contact

Material: butyl-rubber

Minimum layer thickness: 0,7 mm

Break through time: 480 min

Material tested: Butoject® (KCL 898)

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Splash contact

Material: Latex gloves

Minimum layer thickness: 0,6 mm

Break through time: 10 min

Material tested: Lapren® (KCL 706 / Aldrich Z677558, Size M)

Body Protection

Flame retardant antistatic protective clothing.

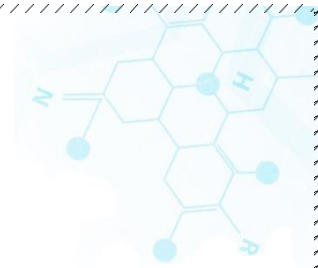
Respiratory protection

Required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type AX.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.





Control of environmental exposure

Do not let product enter drains. Risk of explosion.

Section 9- Physical and Chemical Properties.

Information on basic physical and chemical properties

a) Appearance Form: clear, liquid

Colour: colourless

b) Odour: pungent, weakly aromatic

c) Odour: Threshold 0.1 ppm

d) pH: 5 - 6 at 395 g/l at 20 °C

e) Melting point/freezing point Melting point/range: -94 °C - lit.

f) Initial boiling point and boiling range: 56 °C at 1.013 hPa - lit.

g) Flash point: -17.0 °C - closed cup

h) Evaporation rate: No data available

i) Flammability (solid, gas): No data available

j) Upper/lower flammability or explosive limits Upper explosion limit: 13 %(V) Lower explosion limit: 2 %(V)

k) Vapour pressure: 245.3 hPa at 20,0 °C

l) Vapour density: No data available

m) Density: 0.791 g/cm³ at 25 °C - lit. Relative density: No data available

n) Water solubility: soluble, in all proportions

o) Partition coefficient: n-octanol/water No data available

p) Auto ignition temperature: 465.0 °C

q) Decomposition temperature: Distillable in an un- decomposed state at normal pressure.

r) Viscosity, kinematic: No data available Viscosity, dynamic: No data available

s) Explosive properties: No data available

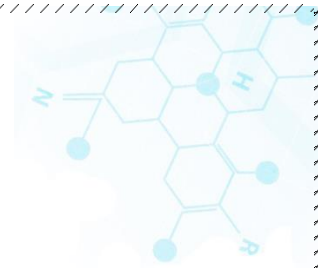
t) Oxidizing properties: none

Other safety information

Conductivity 0.01 µS/cm at 20 °C

Surface tension 23.2 mN/m at 20.0 °C





Section 10- Stability and Reactivity.

Reactivity

Vapours may form explosive mixture with air

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

Possibility of hazardous reactions

Risk of ignition or formation of inflammable gases or vapours with:

Chromosulfuric acid

Chromyl chloride

Ethanolamine

Fluorine

Strong oxidizing agents

Strong reducing agents

Nitric acid

Chromium (VI) oxide

Risk of explosion with: non-metallic oxyhalides

Halogen-halogen compounds

Chloroform

Nitrating acid

Nitrosyl compounds

Hydrogen peroxide

Halogen oxides

Organic nitro compounds

Peroxi compounds

Exothermic reaction with: Bromine

Alkali metals

Alkali hydroxides

Halogenated hydrocarbon

Sulphur dichloride

Phosphorous oxychloride

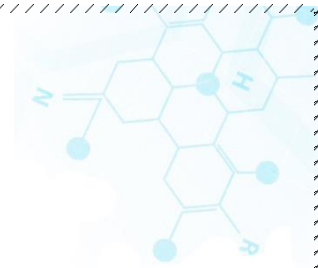
Conditions to avoid

Warming.

Incompatible materials

rubber, various plastics





Section 11- Toxicological Information.

Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - female - 5.800 mg/kg

Remarks: (ECHA)

LC50 Inhalation - Rat - 4 h - 76 mg/l

Remarks: Unconsciousness

Drowsiness, Dizziness

(External MSDS)

LD50 Dermal - Rabbit - 20.000 mg/kg

Remarks: (IUCLID)

Skin corrosion/irritation

Skin - Rabbit

Result: Mild skin irritation - 24 h

(Draize Test)

Remarks: (RTECS)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Eye irritation - 24 h

(Draize Test) Remarks: (RTECS)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: Not a skin sensitizer.

Remarks: (ECHA) Chronic exposure may cause dermatitis.

Germ cell mutagenicity

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

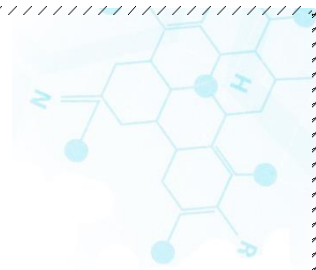
Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471





Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: Mouse lymphoma test

Metabolic activation: without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Additional Information

RTECS: AL3150000

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

After absorption

Headache, Salivation, Nausea, Vomiting, Dizziness, narcosis, Coma

Other dangerous properties cannot be excluded

Handle in accordance with good industrial hygiene and safety practice.

Kidney - Irregularities - Based on Human Evidence

Skin - Dermatitis - Based on Human Evidence

Section 12- Ecological Information.

Toxicity

Toxicity to fish flow-through test LC50 - Pimephales promelas (fathead minnow) - 6.210 mg/l - 96 h (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates static test LC50 - Daphnia pollex (Water flea) - 8.800 mg/l - 48 h Remarks: (ECHA)

Toxicity to algae static test NOEC - M. aeruginosa - 530 mg/l - 8 d (DIN 38412) Remarks: (maximum permissible toxic concentration) (IUCLID)

Toxicity to bacteria static test EC50 - activated sludge - 61,15 mg/l - 30 min (OECD Test Guideline 209)

Persistence and degradability

Biodegradability aerobic - Exposure time 28 d Result: 91 % - Readily biodegradable. (OECD Test Guideline 301B)

Biochemical Oxygen Demand (BOD) 1.850 mg/g Remarks: (IUCLID)

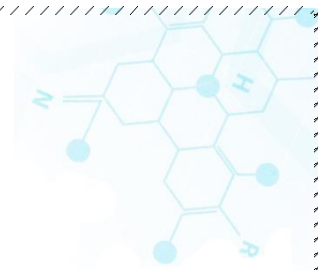
Chemical Oxygen Demand (COD) 2.070 mg/g Remarks: (IUCLID)

Theoretical oxygen demand 2.200 mg/g Remarks: (Lit.)

Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.





Section 13- Disposal Considerations.

Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Section 14- Transport Information.

UN number

ADR/RID: 1090 IMDG: 1090 IATA: 1090

UN proper shipping name

ADR/RID: ACETONE

IMDG: ACETONE

IATA: Acetone

Transport hazard class (es)

ADR/RID: 3 IMDG: 3 IATA: 3

Packaging group

ADR/RID: II IMDG: II IATA: II

Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

15-Other Regulatory Information.

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

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

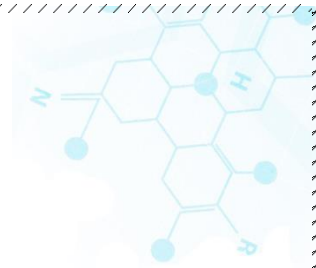
National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. FLAMMABLE LIQUIDS

Other regulations

Take note of Dir 94/33/EC on the protection of young people at work.





Section 16- Other Information.

Briti Scientific provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.



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