

## MATERIAL SAFETY DATA SHEET

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Issue Date:

### 1- Chemical Product Information and Company Identification.

**Product Name:** Methanol, AnStan<sup>®</sup> GC Reference standard.  
**Synonym:** Methyl alcohol.  
**Product code:** BS10084.  
**CAS Number:** 67-56-1  
**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       |
|----------|----------------|--------------------|
| 67-56-1. | Methyl alcohol | CH <sub>4</sub> O. |

### Section 3- Hazards Identification.

**Classification of the substance or mixture**

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

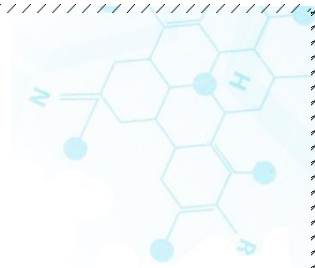
Flammable liquids (Category 2), H225  
Acute toxicity, Oral (Category 3), H301  
Acute toxicity, Inhalation (Category 3), H331  
Acute toxicity, Dermal (Category 3), H311  
Specific target organ toxicity - single exposure (Category 1), H370

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

**Labelling according Regulation (EC) No 1272/2008**



Plot No: 78/B/13, SY-79, Phase-VI, Jeedimetla, Hyderabad - 500 055.  
Telangana, India.



**Hazard statement(s)**

- H225 Highly flammable liquid and vapour.  
H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled  
H370 Causes damage to organs.

**Precautionary statement(s)**

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P280 Wear protective gloves/ protective clothing.  
P302 + P352 + P312 IF ON SKIN: Wash with plenty of water. Call a POISON CENTER or doctor/ physician if you feel unwell.  
P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician.  
P370 + P378 In case of fire: Use dry powder or dry sand to extinguish.  
P403 + P235 Store in a well-ventilated place. Keep cool.

**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**

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. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

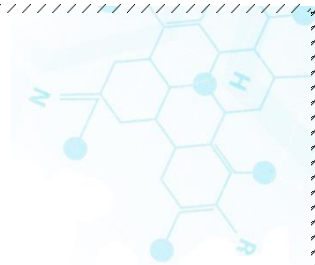
**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

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

Dizziness, Drowsiness, metabolic acidosis, Blurred vision, Seizures., Coma, Blindness, death





## Section 5- Fire Fighting Measures.

### **Extinguishing media**

#### **Suitable extinguishing media**

Dry powder Dry sand

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

Carbon oxides

### **Advice for fire-fighters**

Wear self-contained breathing apparatus for fire fighting if necessary

### **Further information**

Use water spray to cool unopened containers.

## Section 6- Accidental Release Measures.

### **Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

### **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

### **Methods and materials for containment and cleaning up**

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations.

## Section 7- Handling and Storage.

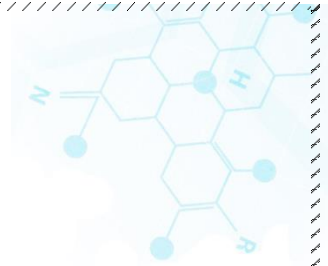
### **Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.

### **Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in a cool, well-ventilated place. Storage class (TRGS 510): Flammable liquid.





## Section 8- Exposure Control/Personal Protection.

### Control parameters

#### Components with workplace control parameters

#### Derived No Effect Level (DNEL)

| Application Area | Exposure Routes | Health effect              | Value                 |
|------------------|-----------------|----------------------------|-----------------------|
| Workers          | Skin contact    | Long-term systemic effects | 40mg/kg BW/d          |
| Consumers        | Skin contact    | Long-term systemic effects | 8mg/kg BW/d           |
| Consumers        | Ingestion       | Long-term systemic effects | 8mg/kg BW/d           |
| Workers          | Skin contact    | Acute systemic effects     | 40mg/kg BW/d          |
| Consumers        | Skin contact    | Acute systemic effects     | 8mg/kg BW/d           |
| Consumers        | Ingestion       | Acute systemic effects     | 8mg/kg BW/            |
| Workers          | Inhalation      | Acute systemic effects     | 260 mg/m <sup>3</sup> |
| Workers          | Inhalation      | Acute local effects        | 260 mg/m <sup>3</sup> |
| Workers          | Inhalation      | Long-term systemic effects | 260 mg/m <sup>3</sup> |
| Workers          | Inhalation      | Long-term local effects    | 260 mg/m <sup>3</sup> |
| Consumers        | Inhalation      | Acute systemic effects     | 50 mg/m <sup>3</sup>  |
| Consumers        | Inhalation      | Acute local effects        | 50 mg/m <sup>3</sup>  |
| Consumers        | Inhalation      | Long-term systemic effects | 50 mg/m <sup>3</sup>  |

#### Predicted No Effect Concentration (PNEC)

| Compartment                   | Value       |
|-------------------------------|-------------|
| Soil                          | 23,5 mg/kg  |
| Marine water                  | 15,4 mg/l   |
| Fresh water                   | 154 mg/l    |
| Fresh water sediment          | 570,4 mg/kg |
| Onsite sewage treatment plant | 100 mg/kg   |

### Exposure controls

#### Appropriate engineering controls

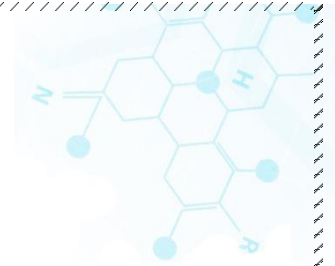
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment.

#### Eye/face protection

Face shield and safety glasses 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, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### **Control of environmental exposure**

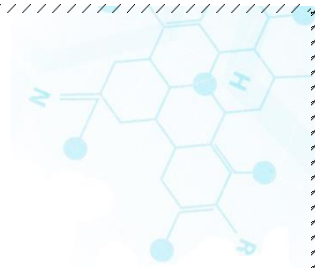
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

## **Section 9- Physical and Chemical Properties.**

### **Information on basic physical and chemical properties**

- a) Appearance Form: liquid Colour: colourless
- b) Odour: pungent
- c) Odour Threshold: No data available
- d) pH: No data available
- e) Melting point/freezing Melting point/range: -98 °C point
- f) Initial boiling point and boiling range: 64,7 °C
- g) Flash point: 9.7 °C - closed cup
- h) Evaporation rate: No data available
- i) Flammability (solid, gas): No data available
- j) Upper/lower Upper explosion limit: 36 %(V) flammability or Lower explosion limit: 6 %(V) explosive limits
- k) Vapour pressure :130.3 hPa at 20.0 °C 546.6 hPa at 50.0 °C 169.27 hPa at 25.0 °C





- l) Vapour density: 1.11
- m) Relative density: 0.791 g/mL at 25 °C
- n) Water solubility: completely miscible
- o) Partition coefficient: n- log Pow: -0.77 octanol/water
- p) Auto-ignition temperature: 455.0 °C at 1.013 hPa
- q) Decomposition temperature: No data available
- r) Viscosity: No data available
- s) Explosive properties: Not explosive
- t) Oxidizing properties: the substance or mixture is not classified as oxidizing.

#### Other safety information

|                         |           |
|-------------------------|-----------|
| Minimum ignition energy | 0.14 mJ   |
| Conductivity            | < 1 μS/cm |
| Relative vapour density | 1.11      |

### Section 10- Stability and Reactivity.

#### Reactivity

No data available

#### Chemical stability

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

No data available

#### Conditions to avoid

Heat, flames and sparks.

#### Incompatible materials

Acid chlorides, Acid anhydrides, oxidizing agents, Alkali metals, Reducing agents, Acids

### Section 11- Toxicological Information.

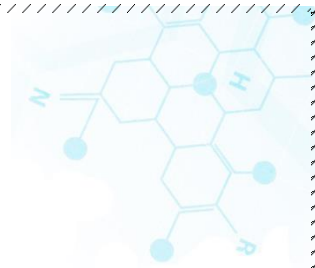
#### Information on toxicological effects

##### Acute toxicity

LDLO Oral - Human - 143 mg/kg

Remarks: Lungs, Thorax, or Respiration: Dyspnoea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.





LD50 Oral - Rat - 1.187 - 2.769 mg/kg  
LC50 Inhalation - Rat - 4 h – 128.2 mg/l  
LC50 Inhalation - Rat - 6 h – 87.6 mg/l.  
LD50 Dermal - Rabbit – 17.100 mg/kg.

**Skin corrosion/irritation**

Skin – Rabbit Result: No skin irritation

**Serious eye damage/eye irritation**

Eyes – Rabbit Result: No eye irritation

**Respiratory or skin sensitisation**

Maximisation Test (GPMT) - Guinea pig  
Does not cause skin sensitisation  
(OECD Test Guideline 406)

**Germ cell mutagenicity**

Ames test S. typhimurium Result: negative  
in vitro assay fibroblast Result: negative Mutation in mammalian somatic cells.  
Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)  
Mouse - male and female Result: negative

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity**

Damage to fetus not classifiable  
Fertility classification not possible from current data

**Specific target organ toxicity - single exposure**

Causes damage to organs.

**Specific target organ toxicity - repeated exposure**

The substance or mixture is not classified as specific target organ toxicant, repeated exposure

**Aspiration hazard**

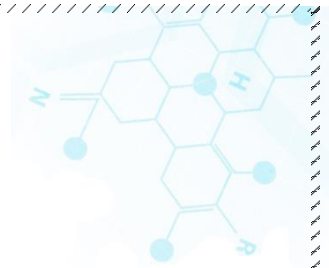
No aspiration toxicity classification

**Additional Information**

RTECS: PC1400000

Effects due to ingestion may include: Headache, Dizziness, Drowsiness, metabolic acidosis, Coma, Seizures. Methyl alcohol may be fatal or cause blindness if swallowed





## Section 12- Ecological Information.

### **Toxicity**

**Toxicity to fish** mortality LC50 - *Lepomis macrochirus* (Bluegill) - 15.400,0 mg/l - 96 h  
NOEC - *Oryzias latipes* - 7.900 mg/l - 200 h

**Toxicity to daphnia and other aquatic invertebrates** EC50 - *Daphnia magna* (Water flea) - > 10.000.00 mg/l - 48 h

**Toxicity to algae** Growth inhibition EC50 - *Scenedesmus capricornutum* (fresh water algae) - 22.000.0 mg/l - 96 h

### **Persistence and degradability**

Biodegradability aerobic - Exposure time 5 d Result: 72 % - rapidly biodegradable

Biochemical Oxygen Demand (BOD) 600 - 1.120 mg/g

Chemical Oxygen Demand (COD) 1.420 mg/g

Theoretical oxygen demand 1.500 mg/g

### **Bio accumulative potential**

Bioaccumulation *Cyprinus carpio* (Carp) - 72 d  
at 20 °C - 5 mg/l  
Bio concentration factor (BCF): 1.0

### **Mobility in soil**

Will not adsorb on soil.

### **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.

### **Other adverse effects**

Additional ecological information Avoid release to the environment.

Stability in water at 19 °C 83 - 91 % - 72 h

Remarks: Hydrolyses on contact with water. Hydrolyses readily

## 13- Disposal Considerations.

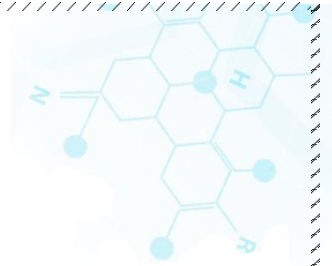
### **Waste treatment methods**

#### **Product**

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. Offer surplus and non-recyclable solutions to a licensed disposal company.







### Contaminated packaging

Dispose of as unused product.

### Section 14- Transport Information.

UN number

ADR/RID: 1230            IMDG: 1230            IATA: 1230

UN proper shipping name

ADR/RID: METHANOL

IMDG: METHANOL

IATA: METHANOL

#### Transport hazard class (es)

ADR/RID: 3 (6.1)            IMDG: 3 (6.1)            IATA: 3 (6.1)

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

#### Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

### 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.

