

## MATERIAL SAFETY DATA SHEET

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Issue Date:

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

**Product Name:** Ethyl Acetate, AnStan<sup>®</sup> GC Reference standard.  
**Synonym:** Ethyl Acetate.  
**Product code:** BS10083.  
**CAS Number:** 141-78-6.  
**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
141-78-6.	Ethyl Acetate.	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub> .

### Section 3- Hazards Identification

Label elements

Labelling according Regulation (EC) No 1272/2008



**Classification of the substance or mixture**

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

Flammable liquids (Category 2), H225

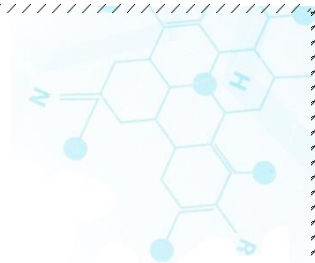
Eye irritation (Category 2), H319

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

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



Plot No: 78/B/13, SY-79, Phase-VI, Jeedimetla, Hyderabad - 500 055.  
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### Classification according to EU Directives 67/548/EEC or 1999/45/EC

F	Highly flammable	R11		
Xi	Irritant	R36	R66	R67

### Hazard statement(s)

H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation  
H336 May cause drowsiness or dizziness.

### Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P261 Avoid breathing vapours.  
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.

### 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

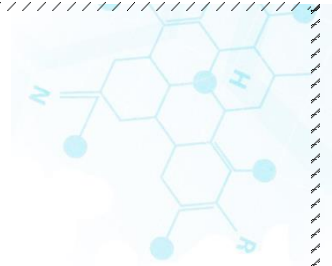
#### In case of skin contact

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

## **Section 5- Fire Fighting Measures.**

### **Extinguishing media**

#### **Suitable extinguishing media**

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

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

No data available

#### **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

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

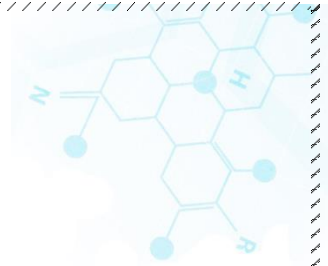
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations

## **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**

Store in cool place. 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.

Handle and store under inert gas. Storage class (TRGS 510): Flammable liquids

**Section 8- Exposure Control/Personal Protection.**

**Control parameters**

**Components with workplace control parameters**

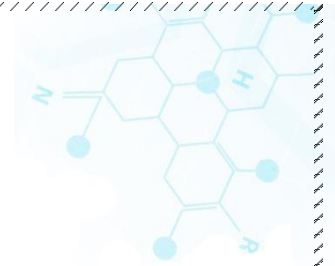
**Derived No Effect Level (DNEL)**

Application Area	Exposure Routes	Health Effect	Value
Workers	Inhalation	Acute systemic effects	1468 mg/m <sup>3</sup>
Workers	Inhalation	Acute local effects	1468 mg/m <sup>3</sup>
Workers	Skin contact	Long-term systemic effects	63mg/kg BW/d
Workers	Inhalation	Long-term systemic effects	734 mg/m <sup>3</sup>
Workers	Inhalation	Long-term local effects	734 mg/m <sup>3</sup>
Consumers	Inhalation	Acute local effects, Acute systemic effects	734 mg/m <sup>3</sup>
Consumers	Skin contact	Long-term systemic effects	37mg/kg BW/d
Consumers	Inhalation	Long-term systemic effects	367 mg/m <sup>3</sup>
Consumers	Ingestion	Long-term systemic effects	4,5mg/kg BW/d
Consumers	Inhalation	Long-term local effects	367 mg/m <sup>3</sup>

**Predicted No Effect Concentration (PNEC)**

Compartment	Value
Soil	0,24 mg/kg
Marine water	0,026 mg/l
Fresh water	0,26 mg/l
Marine sediment	0,125 mg/kg
Fresh water sediment	1,25 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

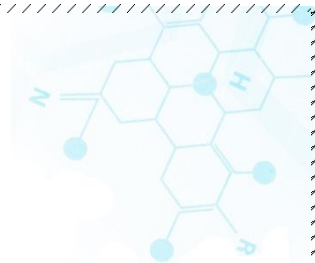
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. 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: clear, liquid Colour: colourless
- b) Odour: No data available
- c) Odour Threshold: No data available
- d) pH: No data available
- e) Melting point/freezing Melting point/range: -84 °C point
- f) Initial boiling point and boiling range: 76.55 – 77.5 °C
- g) Flash point: -2,99 °C - closed cup
- h) Evaporation rate: No data available
- i) Flammability (solid, gas): May form explosive dust-air mixture.
- j) Upper/lower Upper explosion limit:11.5 %(V) flammability or Lower explosion limit: 2.2 %(V) explosive limits.
- k) Vapour pressure: 97.3 hPa at 20,0 °C
- l) Vapour density: No data available
- m) Relative density: 0.90 g/cm<sup>3</sup> at 20 °C
- n) Water solubility: soluble
- o) Partition coefficient: n- log Pow: 0.73 octanol/water
- p) Auto-ignition: 427.0 °C temperature
- q) Decomposition temperature: No data available
- r) Viscosity: No data available
- s) Explosive properties: No data available
- t) Oxidizing properties: No data available

### Other safety information

Surface tension            24.0 mN/m at 20.0 °C

## Section 10- Stability and Reactivity.

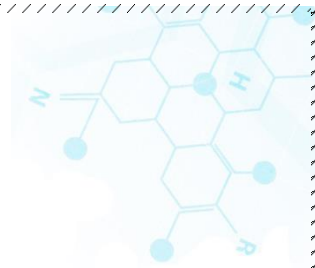
### Reactivity

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**

Strong oxidizing agents

## **Section 11- Toxicological Information.**

### **Information on toxicological effects**

#### **Acute toxicity**

LD50 Oral - Rat - 5.620 mg/kg

LC50 Inhalation - Mouse - 2 h - 45.000 mg/m<sup>3</sup>

LD50 Dermal - Rabbit - > 18.000 mg/kg

#### **Serious eye damage/eye irritation**

Eyes – Rabbit Result: No eye irritation (OECD Test Guideline 405)

#### **Carcinogenicity**

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification

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

### **Additional Information**

RTECS: AH5425000

Inhalation of high concentrations may cause:, Headache, Drowsiness, Dizziness, Vomiting, narcosis, anaemia, Central nervous system depression

Kidney - Irregularities - Based on Human Evidence.

## **Section 12- Ecological Information.**

### **Toxicity**

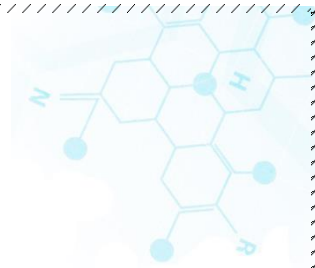
**Toxicity to fish** LC50 - Oncorhynchus mykiss (rainbow trout) - 350,00 - 600,00 mg/l - 96 h

LC50 - Pimephales promelas (fathead minnow) - 220,00 - 250,00 mg/l - 96 h

**Toxicity to daphnia and other aquatic invertebrates** EC50 - Daphnia magna (Water flea) - 2.300,00 - 3.090,00 mg/l - 24 h

LC50 - Daphnia magna (Water flea) - 560 mg/l - 48 h





**Toxicity to algae** EC50 - Algae - 4.300,00 mg/l - 24 h

EC50 - SELENASTRUM - 1.800,00 - 3.200,00 mg/l - 72 h

**Persistence and degradability**

Biodegradability Result: 79 % - Readily biodegradable (OECD Test Guideline 301D).

**Bio accumulative potential**

Bioaccumulation *Leuciscus idus* (Golden orfe) - 3 d

Bio concentration factor (BCF): 30

**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.

**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.

**Contaminated packaging**

Dispose of as unused product.

**Section 14- Transport Information.**

UN number

ADR/RID: 1173      IMDG: 1173      IATA: 1173

UN proper shipping name

ADR/RID: ETHYL ACETATE

IMDG: ETHYL ACETATE

IATA: ETHYL ACETATE

**Transport hazard class (es)**

ADR/RID: 3      IMDG: 3      IATA: 3

Packaging group

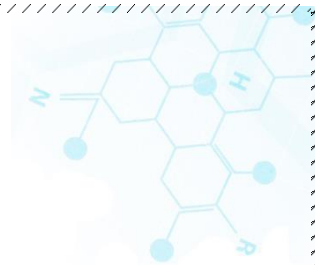
ADR/RID: II      IMDG: II      IATA: II

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 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.

