ETHYL ACETATE
Ethyl Acetate

Ethyl Acetate is a colourless liquid with fruity odour. It is soluble in most organic solvents such as alcohol, acetone, ether, chloroform etc. and slightly soluble in water. It is highly effective and easily broken down in both air and water.

Jubilant Life Sciences can deliver green ethyl acetate made only from biologically produced ethanol to customers with highest environment standards.

Applications

Ethyl Acetate is your choice of solvent due to its least toxicity, agreeable odour and cost efficient. Due to its high evaporation rate it facilitates customised evaporation rate as per the requirement of process. These characteristics finds usage of ethyl acetate in wide range of applications like:

- Ink
- Surface coating and thinner
- Flexible packaging
- Adhesives
- Rubber and polymers
- Pharmaceuticals
- Flavours and essences
- Nail polish remover
- Decaffeinating of Tea and Coffee

Toxicity of Solvents

Ethyl Acetate being one of the least toxic solvent, it keeps application areas of solvents much environment friendly for usage of employees on the shop floor.

<table>
<thead>
<tr>
<th></th>
<th>Ethyl Acetate</th>
<th>Toluene</th>
<th>Methyl Ethyl KetoneAcute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Oral Toxicity LD50, mg/kg</td>
<td>4,100</td>
<td>636</td>
<td>2,737</td>
</tr>
<tr>
<td>Acute Toxicity of vapour LD50, mg/m3</td>
<td>45,000</td>
<td>440</td>
<td>32,000</td>
</tr>
<tr>
<td>Dermal toxicity LD50, ml/kg</td>
<td>&gt;20,000</td>
<td>14,100</td>
<td>6,480</td>
</tr>
</tbody>
</table>

*Lesser the values, higher the toxicity
*Toluene is 100 times more toxic than Ethyl Acetate, in terms of its vapour exposure as solvent application.
**Photochemical SMOG**

- Ethyl Acetate in comparison with other solvents like Toluene, Xylene, MIBK and MEK, emits much lesser amount of VOC (Volatile Organic Compounds)
- Higher emission of VOC generates more Ozone at ground level (troposphere), which facilitate photochemical smog along with other pollutants like NOx and hence reduce air quality available for breathing
- SMOG also reduces visibility at ground level

**Relative Evaporation Rate**

- Better relative evaporation rate of Ethyl Acetate make it solvent of choice as it can help to achieve customised evaporation rate as per the requirement of manufacturer
- Better relative evaporation rate of Ethyl Acetate makes it an efficient solvent
- Higher evaporation rate is beneficial for applications where fast turnaround is desirable

**Carbon Footprint**

Using Ethyl Acetate produced by Jubilant will help you to make your supply chain greener.

JLL saves estimated 3.37 tonne CO2 per tonne of Ethyl Acetate Production

**Graphs and Diagrams:**

- Ozone formation due to VOC content, Kg of Ozone formed/Kg of solvent emitted
- Relative Evaporation Rate (ButAc = 100)
- TCO2 per tonne of Ethyl Acetate

**Sources:**

- Based on Dr. William Carter’s SAPRC - 99 model
- Based published data
- Estimation of Carbon footprint carried out by E&Y
The Life Science Ingredients segment of Jubilant Life Sciences is engaged in Specialty Intermediates, Nutritional Products and Life Science Chemicals through five manufacturing facilities in India.

Serving customers in over 80 countries, the segment offers a broad portfolio of high quality ingredients that find application in wide range of industries.

MANUFACTURING FACILITIES

UTTAR PRADESH
- Gajraula

GUJARAT
- Bharuch
- Samlaya

MAHARASHTRA
- Nira
- Ambernath

OFFICE LOCATIONS

India
Maharashtra
Jubilant Life Sciences Limited
Transocean House, 1st Floor,
Lake Boulevard, Hiranandani Business Park,
Powai, Mumbai - 400 076
Maharashtra, India
Tel : +91 22 40316900

Telangana
Jubilant Life Sciences Limited
304-305, Doshi Chambers,
Opp. United Insurance Bldg.
Bashir Bagh, Hyderabad - 500 029
Telangana, India
Tel : +91 40 2322 7019

China
Jubilant Life Sciences (Shanghai) Limited
Room 602-603,
Shanghai Longemont Summit Center
1088, Yan’an West Road, Shanghai – 200052, China
Phone : +86 21 63907388

Belgium
Jubilant Life Sciences NV
Axxes Business Park, Guldensporenpark 22,
Block C, Merelbeke – 9820, Belgium
Tel : +32 9 233 1404

USA
Jubilant Life Sciences USA Inc.
790 Township Line Road Suite 175 Yardley,
Pennsylvania 19067, USA
Tel : +1 908 658 9988