

CAS No.: 108-21-4

Molecular formula 分子式:  $C_5H_{10}O_2$

IPAC is colorless liquid with pleasant fruity odor. Molecular weight is 102.1, melting point - 73.4°C, boiling point 89°C. As the all-powerful solvent, it is slightly soluble in water and miscible with alcohols, ketones and ethers. Moreover, it has excellent solubility to various synthetic resins and natural resins.

乙酸異丙酯是無色、具有愉快水果香味的液體。分子量是102.1，熔點-73.4°C，沸點89°C。微溶于水，可以與醇、酮、醚等多數溶劑混溶，有“萬能溶劑”之稱，對多種合成樹脂及天然樹脂具有優良的溶解能力。

### Specifications

#### 產品指標

| Item 項目                        | Specification 規格               |
|--------------------------------|--------------------------------|
| Appearance 外觀                  | Colorless and transparent 無色透明 |
| Color (Pt-Co) 色度（鉑沽）           | ≤ 10                           |
| Purity 純度                      | % ≥ 99.5                       |
| Water 水分                       | % ≤ 0.1                        |
| Free acid (Acetic Acid) 酸度（乙酸） | % ≤ 0.01                       |
| Density (20°C) 密度              | kg/m <sup>3</sup> 867~877      |
| Evaporation residue 蒸發殘渣       | % ≤ 0.002                      |

### Product Uses

#### 產品用途

1. Used in the ink industry. The evaporation rate of ethyl acetate in ink solvent is too fast, the price of n-propyl acetate is too expensive, n-butyl acetate has residual odor, toluene is toxic, and procurement procedures are complicated. IPAC is a cost-effective ink solvent. As attachment (2).

用于油墨行業。油墨溶劑用乙酸乙酯揮發速度太快，用乙酸正丙酯價格太貴，用乙酸正丁酯有氣味殘留，用甲苯毒性大，採購手續麻煩。乙酸異丙酯是性價比較高的油墨溶劑。如附件（2）

2. Used in coatings. Evaporating speed of IPAC is between that of ethyl acetate and butyl acetate. With fruity odor and strong solubility, IPAC is an effective solvent in a number of synthetic resins such as ethyl cellulose, nitro cellulose, styrene, acrylic resins. So it can be widely used in coatings of top grade like cellphone paint and toy paint.

# Isopropyl Acetate (IPAC)

## 乙酸異丙酯

用于塗料行業。乙酸異丙酯的揮發速度介于乙酸乙酯與乙酸丁酯之間，氣味芳香，溶解力強，是乙基纖維素、硝基纖維素、苯乙烯、丙烯酸樹脂等許多合成樹脂的有效溶劑，在高檔塗料如手機漆、玩具漆中有廣泛的應用。

3. Used as dehydrating agent in the recycling of acetic acid. IPAC can form azeotrope with water. And compared with other solvents, IPAC has more advantage in selectivity coefficient. It can be used in the recycling of acetic acid in such industry as PTA, cellulose acetate fiber and vinylon.

用作醋酸回收中的脫水劑。乙酸異丙酯能與水形成共沸物，與多種溶劑的脫水選擇性系數相比，乙酸異丙酯有較大的優勢，在PTA、醋酸纖維、維尼綸等行業的醋酸回收裝置上有廣泛的應用。

4. Used in pharmaceutical and pesticide industries. Owing to its strong solubility, extracting capacity, skin infiltration capacity and moderate evaporating speed, IPAC can be used in the production of pharmaceutical and pesticide.

用于制藥工業。乙酸異丙酯因溶解力、萃取能力、皮膚滲透能力強、揮發速度適中，可應用于醫藥及農藥的生產。

5. Used in the production of leather coating, leather PU resin and adhesive. Evaporating speed of IPAC is similar to that of MEK and IPAC is cheaper than MEK. Besides, no need to apply for the purchasing approval of public security, because it is not in the list of chemicals liable to produce narcotic drugs. Therefore, replacing MEK by IPAC can reduce production cost and bring profit.

用于皮革塗層、皮革PU樹脂合成、膠粘劑等生產過程。乙酸異丙酯的揮發速度與丁酮相近，價格比丁酮有優勢，且不屬于易制毒品，購買時無需備案。因此利用乙酸異丙酯替代丁酮，可以降低生產成本，為企業帶來明顯的效益。

6. Used as gasoline additive with its RON 118. As attachment (3).

用于汽油添加劑。研究法辛烷值118。如附件（3）

7. Used for vegetable oil extraction. As attachment (4)

用于植物油浸出。如附件（4）

### Compared with Other Solvents

| Name                      | Physical Properties |                  |                           |                |                  |
|---------------------------|---------------------|------------------|---------------------------|----------------|------------------|
|                           | Molecule weight     | Boiling point °C | Density kg/m <sup>3</sup> | Flash point °C | Evaporation rate |
| Ethyl acetate (EAC)       | 88.1                | 77.1             | 900                       | 7.2            | 525              |
| N-propyl acetate (NPAC)   | 102.1               | 101.6            | 880                       | 14             | 230              |
| Isopropyl acetate (IPAC)  | 102.1               | 89               | 866                       | 16             | 435              |
| Methyl ethyl ketone (MEK) | 72                  | 79.6             | 805                       | -5.6           | 465              |
| Acetone                   | 58                  | 56.12            | 785                       | -10            | 720              |