

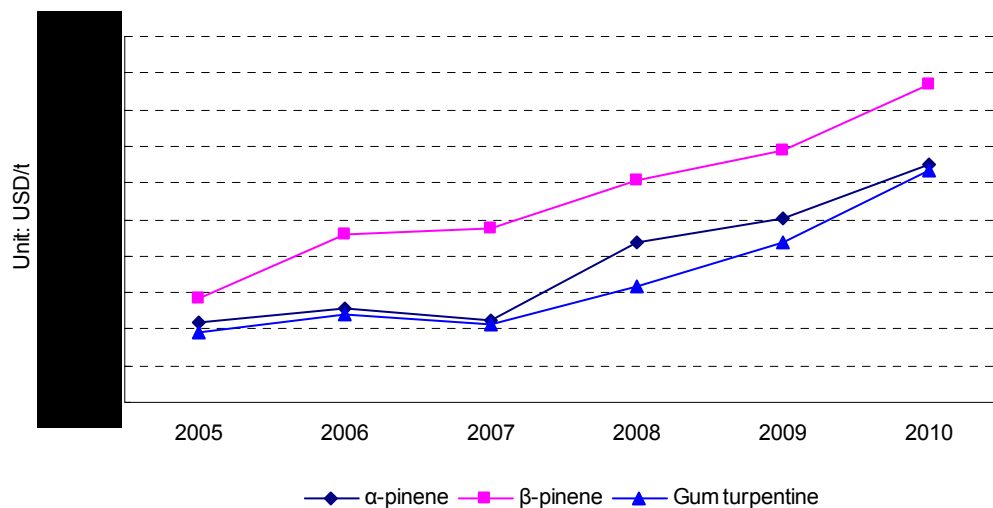
Note: Key data/information in this sample page is hidden, while in the report it is not.

I-2 Price of alpha/beta-pinene

I-2-1 Price in past years

The price of alpha/beta-pinene fluctuated with the price change of gum turpentine in the past.

Figure I-2-1.1 Annual price changes of alpha and beta-pinene in China, 2005~2010

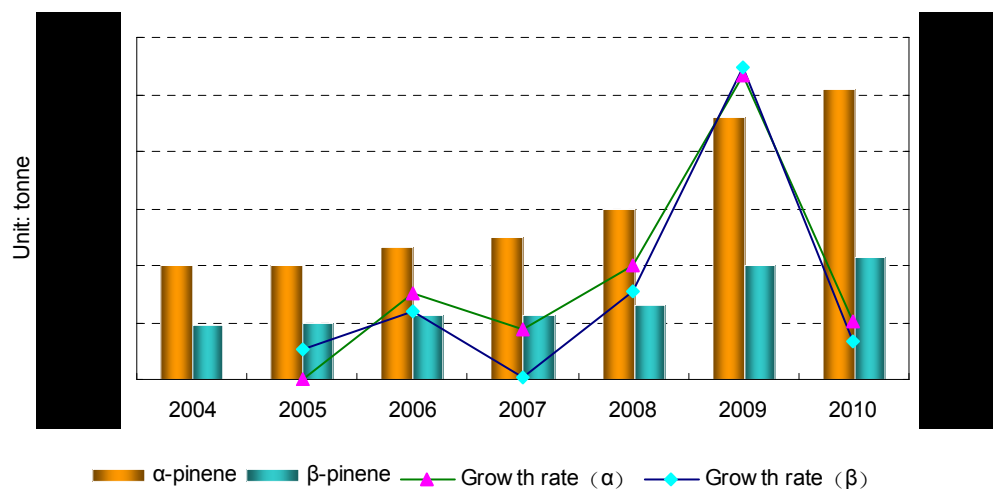


Source: CCM International

I-3 Supply of alpha/beta-pinene in China

I-3-1 Pinene output in past years

Figure I-3-1.1 Output of α-pinene and β-pinene in China, 2004~2010



Source: CCM International

I-3-2 Supply situation of active producers

According to various sources as of August 2011, there are over xx active pinene producers, in terms of commercial production. Among the major xx active producers of pinene,

Table I-3-2.2 Production situation of major active pinene producers in China, 2010

| No. | Name | Abbreviation | Location | α -pinene | | β -pinene | |
|--------|--|---------------------|-----------|--------------------|---------------------|--------------------|---------------------|
| | | | | Capacity, '10, t/a | Output, '10, tonnes | Capacity, '10, t/a | Output, '10, tonnes |
| 1 | Guangdong Zhaoqing Zhongbang Chemicals Co., Ltd. | | | 10,000 | | | |
| 2 | | | | | | | 1,800 |
| 3 | | | | | | | |
| 4 | | | | | | 4,000 | |
| 5 | | | Guangdong | | | | |
| 6 | | | | 6,000 | | | |
| 7 | | Jiangxi Zhongnan | | | | | 1,200 |
| 8 | Jiangxi Xinghua Natural Spice Co., Ltd. | | | | 2,500 | 4,000 | |
| 9 | | | | | 2,500 | | |
| 10 | | | | | | | |
| 11 | | | | 3,000 | | | |
| 12 | | Guangdong Glorychem | | | | | |
| 13 | | | Yunnan | | | | |
| 14 | | | | | | 3,000 | |
| 15 | Jiangxi Ji'an Nature Bioengineering Co., Ltd. | | | | | | |
| 16 | | | Zhejiang | | 1,500 | | 800 |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | 1,000 | | | |
| 20 | | Jiangxi Spice | | | | | |
| 21 | | | | | | | |
| 22 | | | Jiangxi | | | | |
| 23 | | | | | 200 | | |
| 24 | Jiangxi Jishui Huayuan Perfume oil Plant | | | | 200 | | |
| 25 | | | | | 100 | 50 | |
| Others | | - | - | 3,000 | | | |
| Total | | - | - | | | | |

Source: CCM International

I-4-2 IE analysis of pinene, 2010 and Jan. ~ Jun. 2011

Table I-4-2.1 Monthly export situation of pinene in China, 2010 (Quantity: tonne; Price: USD/kg)

| Month | α-pinene | | β-pinene | | Pinene | |
|--------------|-----------|-------|----------|-------|-----------|-------|
| | Quantity | Price | Quantity | Price | Quantity | Price |
| Jan. | | | | | 2,385.200 | |
| Feb. | | | | | | |
| Mar. | | | 276.855 | | | 2.91 |
| Apr. | | 3.18 | | 3.74 | | 3.32 |
| May | | 3.46 | | 4.25 | | |
| Jun. | 810.773 | | | | 810.963 | |
| Jul. | | | 126.645 | | | |
| Aug. | | | | | | |
| Sept. | | | | 4.18 | | |
| Oct. | 1,121.020 | | | | | 3.58 |
| Nov. | | 4.24 | | | | |
| Dec. | | 4.52 | | 4.98 | 3,257.072 | |
| Total | | | | | | |

Note: Total price = Total value / total quantity

Source: CCM International

I-5 Consumption pattern of alpha/beta-pinene in China, 2010

I-5-1 Alpha-pinene

I-5-1-1 Market size and share of alpha-pinene

In 2010, the output of alpha-pinene is xxx tonnes. Besides..

Table I-5-1-1.1 Market size and share of alpha-pinene in different application fields in China, 2010

| Field | Market size | | Market share | |
|--------------------------------|--------------------|-------------------------|----------------|----------------|
| | By volume (tonnes) | By value (USD, million) | By volume, % | By value, % |
| Dihydromyrcene/dihydromyrcenol | | | | 41.70% |
| Synthetic camphor | | 14.47 | 13.76% | |
| Synthetic borneol | 1,440 | | | |
| Other synthetic perfume | | 26.16 | | 24.82% |
| Others | 5,385 | | 17.31% | |
| Total | | | 100.00% | 100.00% |

Source: CCM International

I-5-2 Beta-pinene

I-5-2-1 Market size and share of beta-pinene

β -pinene is very limited in the world. β -pinene is mainly applied to synthesize perfume and polymerized terpene resin.

Table I-5-2-1.1 Market size and share of beta-pinene in different application fields in China, 2010

| Field | Market size | | Market share | |
|-------------------------|-------------------|-------------------------|----------------|----------------|
| | By volume (tonne) | By value (USD, million) | By volume | By value |
| Myrcene | | 59.26 | | |
| All kinds of perfume | 4,240 | | | 24.89% |
| β -terpene resins | | | | |
| Others | | | 0.55% | |
| Total | | | 100.00% | 100.00% |

Source: CCM International

I-6 Brief introduction to raw material supply of alpha/beta-pinene

Turpentine is the major raw material for alpha-pinene and beta-pinene.

Table I-6.1 Output of gum turpentine and gum rosin in China, 1999~2010

| Year | Output of gum turpentine (tonne) | Output of gum rosin (tonne) | Ratio (rosin: turpentine) |
|------|----------------------------------|-----------------------------|---------------------------|
| 1999 | | | 100:13.33 |
| 2000 | | | |
| 2001 | | 500,000 | |
| 2002 | 77,000 | | |
| 2003 | 80,000 | | |
| 2004 | | | 100:13.97 |
| 2005 | | | 100:14.73 |
| 2006 | | 812,000 | |
| 2007 | 121,000 | | |
| 2008 | | | 100:15.50 |
| 2009 | | 553,000 | |
| 2010 | | | |

Note: Ratio represents that how many gum turpentine will be produced in the production of 100 tonnes of gum rosin.

Source: CCM International