

I-1.6 Key Factors and Driven Forces for the Development of Gum Turpentine in China

As a traditional chemical, gum turpentine has a long production history in China. In recent years, gum turpentine industry has developed fast due to the following factors.

- Fast development of GT derivatives

As gum turpentine is mainly consumed within China, so the sales of gum turpentine heavily depends on the development of its downstream products in China especially the development of camphor, borneol, terpene rosin, terpineol, linalool, myrcene and synthetic perfume and so on.

In recent years, the derivatives have a good market especially in oversea market, thus some professional derivatives producers emerged. Thereof, Xiamen Zhongkun is a representative. In 2006, the total number of professional derivatives producers is over 30.

- The development of gum rosin industry

Chinese gum turpentine industry is always a subsidiary industry of gum rosin, just as CST going with paper industry in the European countries. Many producers don't pay much attention to their GT because, to them, GT is only a byproduct of gum rosin. The development of turpentine in China heavily depends on the development of gum rosin.

- The development of petroleum industry

The commonness in application between gum turpentine and oil products can also be embodied especially in cementing adhesive industry. Pinene resin is more expensive than petroleum resins. Meanwhile, after hydrogen sulfide of petroleum resins, its ageing and thermal resistance is better than pinene resin. In the applications of some products, petroleum resins have replaced pinene resin already.

Terpene resin, which is one major consumption field of gum turpentine, also faces the competition from petroleum resins such as C5 and C9 petroleum resin. The production of terpene resin will affect the consumption of gum turpentine as well as its production.

In the aspect of solvent, different kinds of petrified solvent products have replaced gum turpentine products.

Petroleum industry will go on influencing gum turpentine industry negatively.

- Price growth of gum turpentine

The price of gum turpentine changes frequently, and it has been in an increasing trend in recent years. In 2005, the price of gum turpentine rose greatly with the highest price reaching

RMB8,000/t, which is affected by gum rosin price.

The price growth of gum turpentine affects the normal production of downstream products greatly. At the end of 2005, due to the high price of gum turpentine, many downstream enterprises that produce camphor, terpineol and terpene resins stopped their production. Some enterprises transferred to produce other products that have nothing to do with gum turpentine.

In the future, if the price of gum turpentine continues to grow on the basis of 2005, the downstream industries of gum turpentine will stop developing and even counter-march. Thus, the gum turpentine industry will come to a standstill.

- **Oleoresin**

The cost of oleoresin accounts for a large share in the production of gum turpentine, and the cost of oleoresin possesses about 75% of production cost of gum rosin. Thus the price change of oleoresin will have great impact on gum turpentine production.

The output of gum turpentine is absolutely subject to the supply of oleoresin.

- **Weather**

Weather, especially natural disasters including typhoon, drought and flood etc. influence the output of oleoresin as well as gum turpentine production. The length of rainy season and dry season has great impact on the tapping ratio and output of oleoresin. Oleoresin can be only tapped in hot weather. In rainy season, the output yield of oleoresin reduces, and the tapping of oleoresin can't be conducted.

- **Governmental policies**

Government policies have greatly impact on the development of domestic GT industry. In recent years Chinese government has issued a series of regulations, which have great impact on domestic GT industry. For example, the export rebates for GT has been cancelled since April 1st, 2007, which resulted in the increase in the export price, and the export profit decreased sharply. The enthusiasm of these exporters will be sure to decrease. The export tax rebate for gum turpentine used to be 13% before, which was important for the export of domestic gum turpentine.

- **RMB exchange rate**

Currently, the RMB keeps appreciating and its exchange rate against the USD keeps decreasing. Up to late October 2007, the rate is 7.45, and it tends to decrease further in the future. The decrease of RMB exchange rate adds more to the other export cost of gum turpentine, sequentially influences the gum turpentine export.