

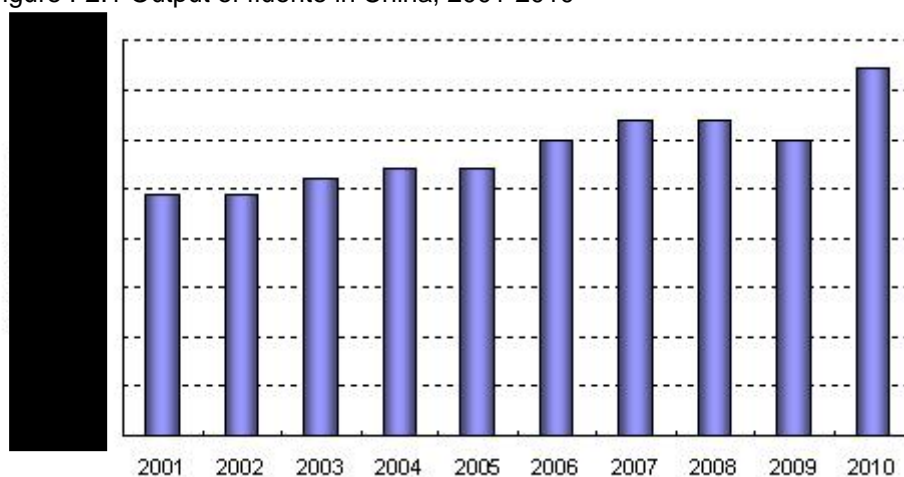
I Fluorite supply in China

I-1 Overview of fluorite reserves in China

In 2010, China is the largest holder of proven reserves of fluorite in the world, with about 1.2 billion tonnes proven reserve of fluorite, which accounts for 45% of the world's total. But in China, compared to the proven reserves, technical reserves of fluorite are about 0.2 million tonnes, accounting for no more than 1% of the world's total. China is the third largest technical reserves of fluorite in the world, following South Africa and Mexico, whose technical reserves are about 0.3 million tonnes and 0.2 million tonnes respectively.

I-2 Production status of fluorite in China

Figure I-2.1 Output of fluorite in China, 2001-2010



Source: CCM International

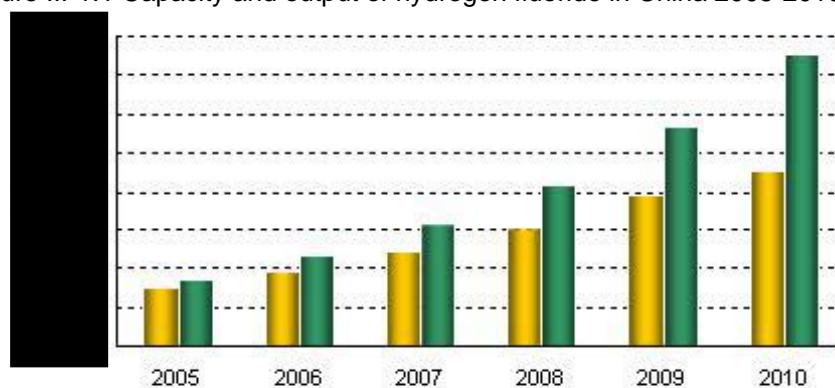
II Overview of fluorine industry in China

Fluorine chemical products with the characteristics of chemical resistance, good high and low temperatures-resistance, aging resistance, low friction, excellent insulation, etc, are widely applied in many fields. In recent years, fluorine chemical industry has been one of the fastest developing and most promising chemical industries in China.

III Inorganic-fluoride

As the raw material and accessory of organic fluorine industry, metallurgy industry and electronic industry, inorganic-fluoride chemical is an important part of fluorine chemical industry.

Figure III-1.1 Capacity and output of hydrogen fluoride in China 2005-2010



Source: CCM International

■ Output ■ Capacity

Table III-4.1 Main producers of ammonium fluoride and ammonium bifluoride in China, 2010

No.	Name	Capacity, t/a
1	Shaowu Haixin Chemical Co., Ltd.	20,000
2	[REDACTED]	[REDACTED]
3	[REDACTED]	[REDACTED]
4	[REDACTED]	[REDACTED]
5	[REDACTED]	[REDACTED]
6	[REDACTED]	[REDACTED]
7	[REDACTED]	[REDACTED]
8	[REDACTED]	[REDACTED]
9	[REDACTED]	[REDACTED]
10	Fujian Qingliu Dongying Chemical Co., Ltd.	5,000

Source: CCM International

IV-2 Production status of fluor-refrigerant industry in China

➤ R22

R22 is the major fluor-refrigerant in China, accounting for about 60% of the total fluor-refrigerant consumption volume. Domestic production capacity of R22 is about [REDACTED] t/a. The output is about [REDACTED] tonnes in 2010. Among which about [REDACTED] tonnes R22 is in air conditioning industry, and [REDACTED] tonnes is used in producing polytetrafluoroethylene.

V Organic-fluorides intermediates

V-2 Main synthesis technique of organic-fluorides intermediates in China

Table V-2-1.1 Main products with diazotization technique route in China, 2010

Fluorobenzene series	Benzyl fluorides series	Heterocyclic series
- Fluorobenzene	- 2,3,4-Trifluorobenzenamine	
	- 2-Fluorotoluene	
- * 2,4-Difluoroaniline		

Note: * Diazotization technique route is the main technique route for this product in China. ** The manufacture of this product had not been industrialized in China

Source: CCM International

VI-1-3 Market status of fluor resins in China

Application with the utility of low friction is the largest application for fluor rubber, accounting for █% of fluor resin market. The second largest application is in the utility of anti-stick and anti-corrosion; the market share is █%. High-frequency insulation is another important utility for fluor resin, accounting for █% market share, promoted by the rapid growth of electronic industry.

VI-2-3 Market status of fluor rubber in China

➤ Supply of fluor rubber in China

With the rapid increase in the output of automobile in recent years, China's capacity of fluor rubber witnessed a rapid increase. Compared to 2005, the capacity of fluor rubber in China expands by █ times in 2010. The output of fluoro rubber █ from █ tonnes in 2005 to █ tonnes in 2010 and the CAGR is █.