

II-1 Current production situation of paraquat technical in China

China is the largest paraquat technical producer in the world. Generally, the most ordinary paraquat technical is paraquat TK 42% (calculated by chloridion) and paraquat TK 30.5% (calculated by cation). In this report, paraquat TK 42% is used for the description of Chinese paraquat industry.

The current capacity of paraquat TK 42% is xxx t/a, which can meet the total demand of the whole world. Actually, the operation rate of paraquat technical is as low as 54% in China. Its major reasons are listed as follows.

- ✓ The insufficient supply of pyridine restricts the production of paraquat.
- ✓ China paraquat manufacturers tend to stop the production in off season.

FigureII-1-1 The output of paraquat technical in China in recent years

.....

It is estimated that the output of paraquat TK 42% in 2007 is xxx tonnes, and its output in 2006 was xxx tonnes. The large paraquat TK producers expand their production, while some small-scale paraquat technical producers stopped the production and even shut down, because of the fierce market competition.

TableII-1-1 List of the closed paraquat technical producers in recent years

Code	Company	Location	time
1	Hebei Cangzhou Tianhe Agrochemical Co., Ltd.	Hebei	Closed in 2006
2	Heilongjiang Hegang City TH-UNIS Insight Co., Ltd.	Heilongjiang	Closed in 2006
3	Shanghai CAC Group Co., Ltd.	Shanghai	N/A
4	Zhejiang Agrocn Industry Co., Ltd.	Zhejiang	Closed in 2006
5	Zhejiang Shenghua Biok Co., Ltd.	Zhejiang	Closed in 2005

The CAGR (compound annual growth rate) of paraquat technical output is 21.88% from 2003 to 2007, showing that the whole development is very fast in recent years. Many enterprises blindly enlarge their production capacity, because they are excessively optimistic about paraquat industry, even though paraquat has toxicity problems and it faces competition from glyphosate.

Chinese government and paraquat technical manufacturers have started to pay attention to the safety problems in paraquat production since 2003. To some extent, the nauseant (PP796), greenishblue warm color and abnormal taste agent must be added in paraquat to ensure the application safety of paraquat. This also helps to expand the application of paraquat in China.

Though the whole trend of paraquat industry is growing, the paraquat production fluctuates along with the changes of pyridine supply, especially during the high season of paraquat production. Though Jiangsu Redsun claimed to have set up an 8,000t/a pyridine equipment, the supply of pyridine is still small, compared with China's annual demand of pyridine, which is