10. Import & Export of Bromine in China

In the import & export business bromine falls into the HS28013020. The details import & export shipment record of bromine has been attached in table 10-3~10-4 in Excel form.

As there are a variety of bromides, each of which having different group and hence is classified into different HS code, it is not possible to identify the import & export actitivities of individual bromide as do to the bromine. We list the HS codes that may be related to the bromides in appendix III. Among the HS codes of bromides, only two HS codes have referential meaning. They are

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Table 10 -1 Import & Export of bromine in the past

Year	Import vo	olume	Import	value	Export	volume	Export	value
	(MT)		(1,000USD)		(MT)		(1,000USD)	
1997	1,892		1,828.8		58		65.8	
1998	1,920		1,709.1		58		59.8	
1999	2,538		2,186.9		114		122	
2000	4,015		3,293.1		148		166.7	
2001	4,645		3,683.5		68		76.7	

13. Bromine Consumption in China

13.1 Bromine Consumption by Quantity

In discussing the bromine consumption situation, we use superficial consumption to reflect the actual consumption situations. The superficial consumption can be described by this formula:

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Table 13.1-1 Superficial consumption of bromine in the past years (Unit: MT)

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Year	1997	1998	1999	2000	2001
Production	50,565	49,248	56,622	56,245	63,197
Import	1,892	1,920	2,538	4,015	4,645
Export	58	58	114	148	68
Superficial Consumption	52,399	51,110	59,046	60,112	67,774

In this discussion we assume that the bromine consumption in 2000 to be 60,000MT.

13.2 Consumption by Geographical Locations

We have consulted many industrial experts as well as some sales clerks in the bromine factories, in regard to the bromine consumption in different areas of China. The finding is that Jiangsu, Zhejiang and Shandong are the three biggest provinces to consume bromine. Consumers in Jiangsu province mainly use bromine to make flame-retardants; consumers in Zhejiang province mainly use bromine to make organic bromides like pharmaceuticals & their intermediates; while consumers in Shandong, metal bromides & fire extinguishing agents.

13.3 Bromine Consumption by End Uses & Brief Introduction to Bromides Situation

The end-use of bromine is to make bromides. So in this report we put the bromine end use sections and the bromide industry together. By breaking down the bromine consumption in each end use section in 2000 we discuss therein in brief the bromides situation.

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Table 13.3-1 Bromine end uses in the past years (%)

Year	1981	1985	1990	1995	2000	Estimated quantity
						in 2000, MT
Flame retardant		9.7	11.2	18.2		
Pharmaceutical	33.3	32.3	35.1	22.9		
Fire extinguishing agent	11	24.2	34.1	17.1		
Dyestuff	13.3	11.3	15.8	9.1		
Agrochemical	20	3.2	2.4	0.3		
Bromides	N/A	N/A	N/A	27.6		
Others	22.4	19.3	1.4	4.8		
Total %	100	100	100	100		
Superficial Consumption (MT)	3,627	2,918	7,878	34,011		