

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

2 Overview of bromides in oilfield chemicals

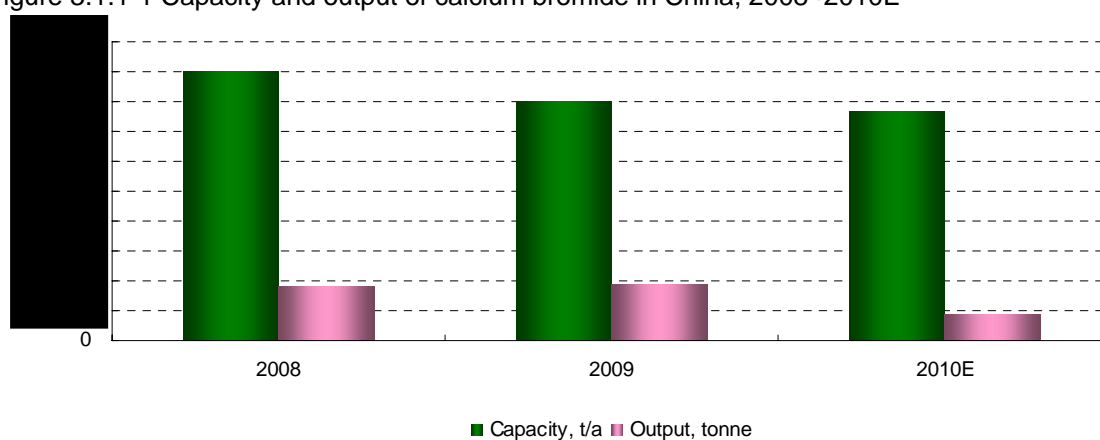
At present, the inorganic bromides applied in oilfield chemicals include calcium bromide, zinc bromide, sodium bromide and potassium bromide.

3 Main applications in oilfield chemicals

3.1 Calcium bromide

3.1.1 Status of calcium bromide production in China

Figure 3.1.1-1 Capacity and output of calcium bromide in China, 2008~2010E



Source: CCM International

3.1.2 Main producers of calcium bromide in China

Table 3.1.2-1 Major calcium bromide producers in China, 2009

| No. | Name | Capacity'10, t/a | Output'09, tonne | Quotation, USD/t |
|-----|---------------------------------|---------------------|---------------------|---------------------|
| 1 | XX Chemical Co., Ltd. | XX | 4,000 | - |
| 2 | Shandong XX Chemical Co., Ltd. | 30,000 | XX | XX |
| 3 | Shandong XX Chemicals Co., Ltd. | XX | XX | - |
| 4 | Jinan XX Chemical Co., Ltd. | XX | 3,000 | - |
| 5 | XX Chemical Industry Co., Ltd. | XX | XX | - |
| 6 | Dongying XX Chemicals Co., Ltd. | 10,000 | XX | - |
| 7 | XX Co., Ltd. | XX | 1,000 | - |
| 8 | Weifang XX Industrial Co., Ltd. | XX | XX | - |
| | Others | XX | XX | - |
| | Total | XX | XX | - |

Note: the quotations of bromine were given during 28th Oct. and 3rd Nov.

Source: CCM International

3.2 Sodium bromide

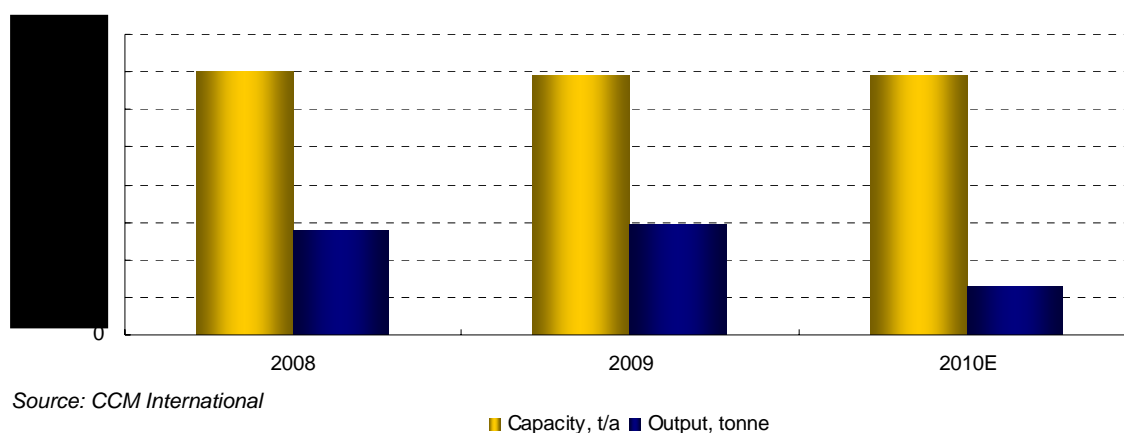
Table 3.2-1 Application of sodium bromide

| Application | Output'09, tonne | Export ratio |
|----------------------------------|------------------|--------------|
| Oilfield chemical | XX~XX | XX~XX% |
| Water treatment chemical | XX~XX | XX% |
| Medicine (sedative and diuretic) | XX~XX | XX~XX%% |

Source: CCM International

3.2.1 Status of sodium bromide production in China

Figure 3.2.1-1 Capacity and output of sodium bromide in China, 2008~2010E



Source: CCM International

■ Capacity, t/a ■ Output, tonne

3.2.2 Main producers of sodium bromide in China

Table 3.2.2-1 Major sodium bromide producers in China, 2009

| No. | Name | Capacity'10, t/a | Output'09, tonne | Quotation, USD/t |
|-----|---|------------------|------------------|-------------------------|
| 1 | Shandong XX Chemical Co., Ltd. | XX | XX | Solid: XX Liquid: XX |
| 2 | Weifang XX Industrial Co., Ltd. | XX | XX | Solid: XX |
| 3 | Shandong XX Chemicals Co., Ltd. | 4,000 | XX | - |
| 4 | Shouguang XX Co., Ltd. | XX | XX | Solid: XX |
| 5 | XX Chemical Industry Co., Ltd. | XX | XX | - |
| 6 | Jinan XX Chemical Co., Ltd. | XX | 1,500 | - |
| 7 | XX Chemical Co., Ltd. | 2,000 | XX | - |
| 8 | Shanghai XX Chemical Co., Ltd. | XX | XX | XX |
| 9 | XX Chemicals Co., Ltd. | XX | 1,000 | - |
| 10 | XX Chemical Industry Co., Ltd. | 3,000 | XX | - |
| 11 | XX Chemical Plant | XX | XX | - |
| 12 | Shandong XX Chemical Industrial Co., Ltd. | XX | XX | - |
| 13 | XX Co., Ltd. | XX | XX | - |
| | Others | XX | 600 | - |
| | Total | XX | XX | - |

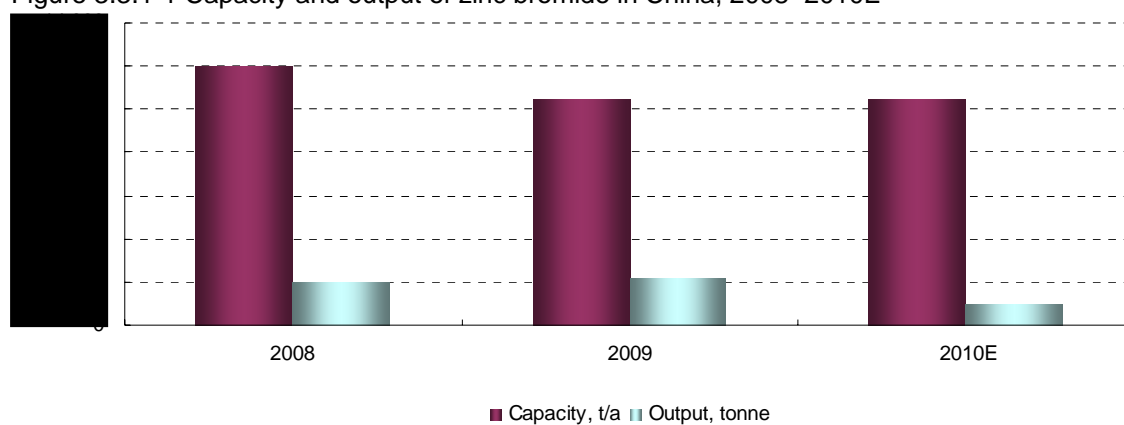
Note: the quotations of bromine were given during 28th Oct. and 3rd Nov.

Source: CCM International

3.3 Zinc bromide

3.3.1 Status of zinc bromide production in China

Figure 3.3.1-1 Capacity and output of zinc bromide in China, 2008~2010E



Source: CCM International

3.3.2 Main producers of zinc bromide in China

Table 3.3.2-1 Major zinc bromide producers in China, 2009

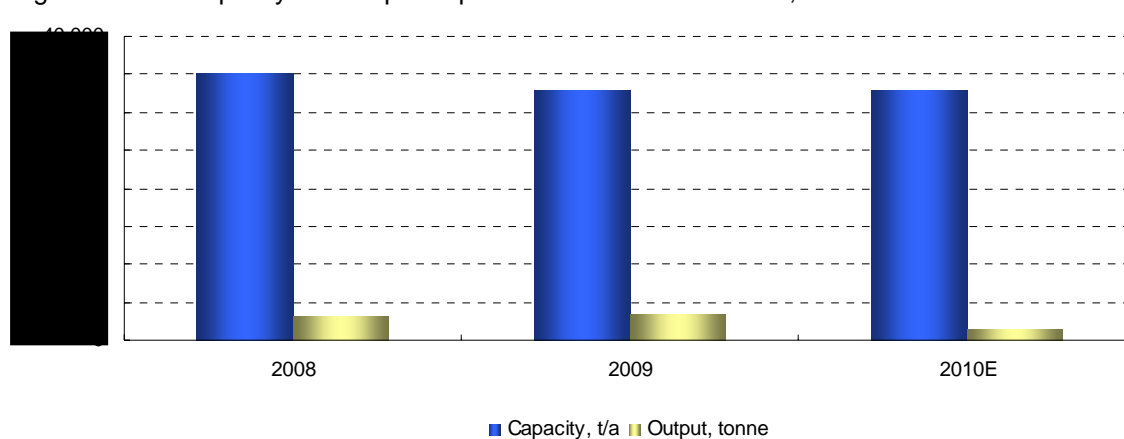
| No. | Name | Capacity'10, t/a | Output'09, tonne | Quotation, USD/t |
|-----|---------------------------------|---------------------|---------------------|---------------------|
| 1 | Weifang XX Industrial Co., Ltd. | XX | 1000 | XX |
| 2 | Weifang XX Chemical Co., Ltd. | 1,000 | XX | - |
| 3 | Shandong XX Chemical Co., Ltd. | XX | XX | XX |
| 4 | Jinan XX Chemical Co.,Ltd. | XX | XX | - |
| | Others | XX | 100 | - |
| | Total | XX | XX | - |

Source: CCM International

3.4 Potassium bromide

3.4.1 Status of potassium bromide production in China

Figure 3.4.1-1 Capacity and output of potassium bromide in China, 2008~2010E



Source: CCM International

3.4.2 Main producers of potassium bromide in China

Table 3.4.2-1 Major potassium bromide producers in China, 2009

| No. | Name | Capacity'10, t/a | Output'09, tonne |
|-----|---------------------------------|---------------------|---------------------|
| 1 | Shanghai XX Chemical Co., Ltd. | XX | XX |
| 2 | Jiangsu XX Industry Co., Ltd. | XX | XX |
| 3 | Shandong XX Chemical Co., Ltd. | 5,000 | XX |
| 4 | XX Chemical Plant | XX | XX |
| 5 | XX Chemical Co., Ltd. | XX | XX |
| 6 | Dongying XX Co., Ltd. | 1,000 | XX |
| 7 | Shandong XX Chemicals Co., Ltd. | XX | 100 |
| 8 | Jinan XX Co.,Ltd. | XX | XX |
| 9 | XX Co., Ltd. | 1,000 | XX |
| | Others | XX | 100 |
| | Total | XX | XX |

Source: CCM International