BUSS ChemTech

FLUORINE TECHNOLOGY

ARSENIC REMOVAL

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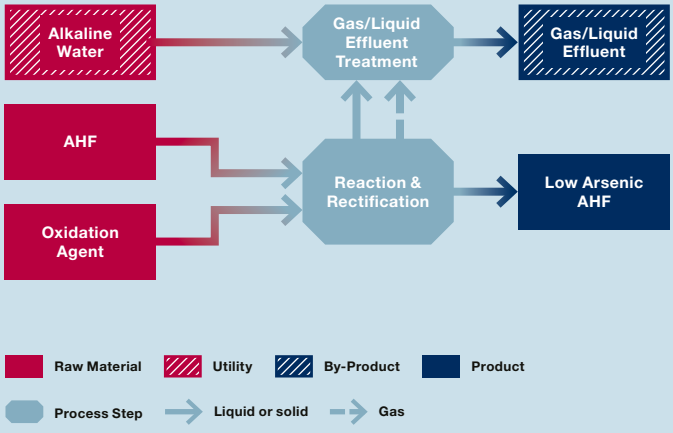
BUSS ChemTech is recognized as the world leading technology supplier for fluorine chemicals.

In addition to our technologies for the production of Anhydrous Hydrogen Fluoride, we also have the know-how to remove arsenic from AHF.

“Low Arsenic” AHF is used as a raw material for the production of LIB electrolyte salt – ($LiPF_6$) in the lithium-ion battery supply chain.



The removal of arsenic components can be done with two different raw materials which act as an oxidation agent:

- Fluorine Gas (F_2)
- Aqueous solution of potassium pergamanate ($KMnO_4$)

Our experience allows us to offer plants with full operating guarantees.

**Learn more about our technologies.
Scan the QR code now!**

THIS RESULTS IN

- "Low Arsenic" AHF for producing $LiPF_6$
- Plant capacities and product specifications tailored to your requirements
- Critical equipment manufactured to strictly controlled specifications
- Prolonged plant life and high productivity
- Optimized CAPEX and OPEX

RANGE OF SERVICES

- Conceptual design
- Feasibility studies
- Basic engineering design
- Key equipment supply
- Commissioning and start-up
- After sales service

EXPECTED CONSUMPTION (1)

ATTRIBUTE	F_2 (2)	$KMnO_4$ (3)	UNITS
"High Arsenic" AHF (e.g. 40 ppm As)	1.001	1.012	mt
Oxidation agent	0.603 1.5 6.3	2.490 73.5 –	kg kg/kg(As) kg/kg(H_2O)
Electricity	4.3	12.0	kWh
Process water (for gaseous effl. treatm.)	110	110	kg
Cooling duty	1.87	3.24	GJ
Heating duty	1.87	3.10	GJ

(1) Values are per metric ton of "Low Arsenic" AHF produced

PRODUCT SPECIFICATIONS

ATTRIBUTE	F_2 (2)	$KMnO_4$ (3)	UNITS
AHF (min.)	99.99	99.98	wt-%
As (max.)	1	1	ppm
Water (max.)	10	80	ppm
Sulphuric Acid (max.)	25	30	ppm
FSA (max.)	40	40	ppm
Sulphur Dioxide (max.)	20	20	ppm

(2) Fluorine gas (F_2 100 wt-%)
(3) Aqueous $KMnO_4$ solution (5 wt-%)

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