

Processing bromine containing waste streams

ICL-IP Terneuzen BV is a chemical production company specialising in the production of flame retardants, fine chemicals, biocides and inorganic chemicals. Production is mainly carried out by flexible batch processes.

We offer our specialist knowledge and equipment for contract manufacturing of chemicals and blends, as well as our bromine recovery installation, which we employ for the work-up of bromine containing waste streams.



General

In our continuous pursuit of sustainability ICL-IP Terneuzen B.V. aims to engage and participate with our customers in finding solutions for their waste problems. We can and want to play an active part in this by taking back brominated waste streams, created during the processing of our products and to recover brominated products or elementary bromine from these streams.

Which waste streams?

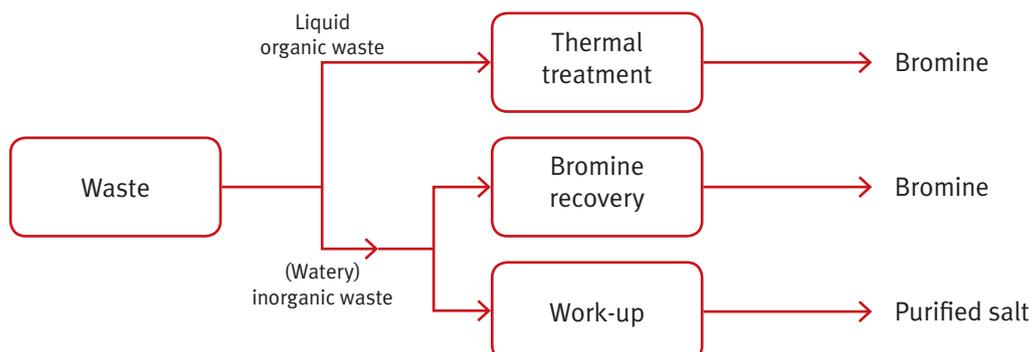
We can treat both organic and inorganic waste streams. For inorganic streams, after sample analysis, the best work-up method is determined, being either recovery of bromine or of a (re)usable product. Organic waste streams are oxidised and subsequently bromine is recovered.



Work method

For each waste stream we will determine the ultimate work-up method. After having obtained your sample, analytical work is done in our laboratory and we check if the product can be recovered directly. If this is not the case then the possibility of recovering elementary bromine is examined. In particular inorganic material is suitable for conversion to pure salt. If this is not possible, the bromide salt can be converted to elementary bromine.

Organic material in general is thermally treated, followed by bromine recovery.



Technology applied

To carry out these processes successfully we have the following equipment at our disposal:

- Reactors for different batch processes
- An installation for thermal treatment of bromine containing waste streams
- Equipment for bromine recovery

Processing the waste streams at ICL-IP Terneuzen is done with a keen eye for responsible care. We use a catalytic afterburner to minimise emissions of volatile organic material and physical-chemical and biological water purifying equipment for the removal of pollutants from waste water.



Logistics

ICL-IP Terneuzen is located near the major industrial areas of Rotterdam, Antwerp and Ghent.

We have both outdoor and indoor storage facilities available, loading and unloading docks for lorries and railway carriages, including a 20 ft forklift for containers.

A jetty for loading and unloading of ships is at your disposal, as well as facilities for both the filling and emptying of drums and IBC's.

Permits & management systems

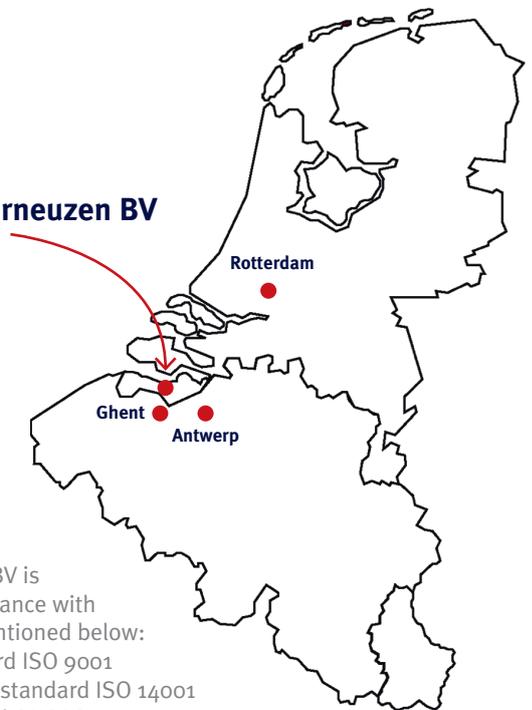
ICL-IP Terneuzen is a chemical company and holds permits in accordance with SEVESO- and IPPC-guidelines. The processing of waste is an explicit part of our permit. We can also assist in obtaining EVOA decrees for border crossing waste transports. This also applies to procedures for waste streams originating from outside Europe.

ICL-IP Terneuzen BV is certified in accordance with the standards mentioned below:

- Quality standard ISO 9001
- Environmental standard ISO 14001
- Safety standard OHSAS 18001
- Energy standard ISO 50001

All our engineering activities are preceded by an in-depth safety study carried out by our HAZOP-team.

ICL-IP Terneuzen BV



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