

16. 소금

(1) sodium chlorate, powder, at plant

| Reference function | information |
|----------------------------|---|
| Name | sodium chlorate, powder, at plant |
| Unit | kg |
| Category | chemicals |
| Subcategory | inorganics |
| Amount | 1 |
| Included processes | Manufacturing process by means of electrolysis of a sodium chloride solution is considered, starting with this raw material and including brine purification. Final drying of the sodium chlorate crystals is also included, as well as the production of hydrogen gas. |
| General comment | Manufacturing process includes raw materials, auxiliaries, energy, transportation, infrastructure and land use, as well as emissions into air and water and wastes. Transport of the raw materials, auxiliaries and wastes is included, transport and storage of the final product are not included. No byproducts or coproducts are considered. Hydrogen is not considered a byproduct from the process, but an air emission. Transient or unstable operations are not considered, but the production during stable operation conditions. Emissions to air are considered as emanating in a high population density area. Emissions into water are assumed to be emitted into rivers. Solid wastes are considered to be sent to landfill. The values in the report are literature average values, based on Fawer 2002, a personal communication on the background information from Bowstead and Fawer 1996, regarding confidential data of European manufacturing plants. This information allows to disclose the data from Bowsted and Fawer1996 in a suitable manner for the present study. Inventory refers to 1 kg 100% sodium chlorate, powder, at plant. |
| Infrastructure included | Yes |
| Dataset relates to product | Yes |
| Geography | Average values of six European manufacturing plants |
| Technology | period correspond to the early ninethies, therefore estimated 1990 to 1995 |
| Start year | 1990 |
| End year | 1995 |