(3) fluosilicic acid, 22% in H2O, at plant

Reference function	information
Name	fluosilicic acid, 22% in H2O, at plant
Unit	kg
Category	chemicals
Subcategory	inorganics
Amount	1
Included processes	Raw materials, processing chemicals and processing energy, direct emissions to air from process, emissions to air and water from phosphogypsum disposal, emission of radioactive substances from gypsum to air and water, transport of raw materials to the plant, estimation for process infrastructure. The process includes data on emissions from phosphogypsum disposal to the ocean.
General comment	The process describes the production of phosphoric acid from dry phosphate rock with the dyhydrate process in Morocco. As products of the multi output process fertiliser grade phosphoric acid (impure with 51% P2O5) and dilute fluosilic acid (22% in H2O) was considered.
Infrastructure included	Yes
Dataset relates to product	Yes
Geography	Data for amount of phosphoric acid production from statisitcs of IFA (International Fertiliser Agency). Data on phosphoric acid process from a report concerning one production in Morocco and from different literature sources and studies concerning also other locations other than Morocco (mainly U.S., Florida). Most data asessed for processes used in the Safi-plant were extrapolated for the whole Moroccan production. Only production from dry rock considered as in the mayority of the sites in Morocco used. Data for production of fluosilic acid from one european study (EFMA). This data was used for the whole Moroccan production.
Technology	Data refers to wet-phosphoric acid production from dry phosphate rock by the dihydrate process. Technology with sea water once-through cooling and gypsum disposal to the ocean considered.
Start year	1986
End year	2001