

Plastic LCI Dataset

Functional unit: 1000 kg Polyvinyl Chloride (PVC) (1)

1 Material Inputs		Unit
Main material inputs		
Process Chemicals (2)	1.80E+01	kg
Sodium Chloride	5.10E+02	kg
Other (3)	6.00E-01	kg
Land use		
Primary ancillary materials		

2 Energy		Unit
Coal	5.20E+03	MJ
Crude Oil	4.86E+03	MJ
Natural Gas	2.84E+04	MJ
Hydro	4.19E+02	MJ
Nuclear	1.89E+03	MJ
Other	2.28E-01	MJ
Total Fuels	4.08E+04	MJ
Coal		
Crude Oil	8.34E+03	MJ
Natural Gas	1.07E+04	MJ
Total Feedstocks (4)	1.90E+04	MJ
Total Fuel and Feedstocks	5.98E+04	MJ

3 Water Use		Unit
Total water		
Fuel related water		
Process related water		

4 Emissions to Air		Unit
Carbon dioxide	2.00E+03	kg
CO2 fossil fuel		
CO2 biomass		
Carbon monoxide	8.40E-01	kg

Sulphur oxides (reported as SO ₂)	5.30E+00	kg
Nitrogen oxides (reported as NO ₂)	6.30E+00	kg
Methane	2.20E+01	kg
Dust & particles (includes metals) (5)	1.41E+00	kg
Acid gases	1.60E-01	kg
NMHC (non-methane hydrocarbons)		
VOC (6)	5.80E+00	kg
Hydrocarbons (unspecified)	5.40E-01	kg
Nitrogen	1.70E+00	kg
Other organic compounds (7)	2.50E-01	kg
Other (8)	6.24E-01	kg

5 Emissions to Water		Unit
Phosphates and ammonia	8.00E-03	kg
Oils and greases	2.00E-01	kg
Suspended solids	3.30E+00	kg
Other organics	5.80E-02	kg
Other (8)	7.40E-01	kg
Hydrocarbons	7.40E-02	kg
Metals	1.70E-01	kg
Heavy Metals		
Acids	4.90E-01	kg
BOD	2.90E-01	kg
COD	6.70E-01	kg
Salinity	1.20E+01	kg
Dissolved solids	2.50E+01	kg

6 Wastes		Unit
Total waste		
Process related wastes		
Municipal wastes		
Emissions to Land		
RCRA D (9)	1.10E+02	kg
RCRA C (10)	3.60E+00	kg
Emissions to Deepwell		
RCRA D (9)	5.90E+00	kg
RCRA C (10)	5.00E-03	kg

Footnotes

(1) Numbers may not add up exactly due to rounding off

(2) Includes additives, catalysts, chemicals, etc.

(3) Includes other feedstocks, such as sulfur, SO₂ from recovery operations, etc.

(4) Feedstock values are the theoretical energy that could be recovered via combustion

(5) Total of Metals and metal compounds and PM₁₀

- (6) VOCs may or may not include compounds already listed under "hydrocarbons" or "other organic compounds"
- (7) Includes oxygenated hydrocarbons, halogenated hydrocarbons, nitrogen-containing hydrocarbons, etc.
- (8) Includes compounds not containing both carbon and hydrogen
- (9) RCRA D EPA-regulated non-hazardous waste
- (10) RCRA C EPA-regulated hazardous waste