



Brightway

Processes (dictionary)

My_little_database,
2fc6deea-6437-4b9f-bf91-89bca44d30f0

categoryManufacturers

list, str

locationDJ

str

namePlastic manufacturing

str

code2fc6deea-6437-4b9f-bf91-89bca44d30f0

str

unitkg

str

type

biosphere

str

product

str

process

str

exchanges

input

My_little_database, 62714200-1a0d-43fb-9b48-99df3f233c94

tuple, str

name

Plastic

str

type

biosphere

str

technosphere

str

production

str

amount

1

float

Reference flow / Quantitative reference / Output

input

My_little_database, cd154d8f-0694-43b2-b4ab-e44101e122bd

tuple, str

name

Bad stuff

str

type

biosphere

str

technosphere

str

production

str

amount

2

float

Output

input

My_little_database, 8849be54-1b13-4d7e-85f6-2297817333f2

tuple, str

name

Crude oil

str

type

biosphere

str

technosphere

str

production

str

amount

-1

float

Input

My_little_database,
7e5ec332-09fd-4706-8373-3f140a539028

categoryManufacturers

list, str

locationDJ

str

nameStainless steel manufacturing

str

code7e5ec332-09fd-4706-8373-3f140a539028

str

unitkg

str

type

biosphere

str

product

str

process

str

exchanges

input

My_little_database, 3355a1b9-8fbf-40de-b449-ea6399a8a323

tuple, str

name

Stainless steel

str

type

biosphere

str

technosphere

str

production

str

amount

1

float

Reference flow / Quantitative reference / Output

input

My_little_database, cd154d8f-0694-43b2-b4ab-e44101e122bd

tuple, str

name

Bad stuff

str

type

biosphere

str

technosphere

str

production

str

amount

3

float

Output

input

My_little_database, 7528830a-7344-43be-b484-ac4dc625f272

tuple, str

name

Virgin metals

str

type

biosphere

str

technosphere

str

production

str

amount

-1

float

Input

My_little_database,
fae6799b-7326-452c-92b3-76758bbcac22

categoryAssemblers

list, str

locationDJ

str

nameBottle assembly

str

codefae6799b-7326-452c-92b3-76758bbcac22

str

unit

number of items

str

type

biosphere

str

product

str

process

str

exchanges

input

My_little_database, b806c2cd-d563-43c4-a0c9-9c7dd5d513d3

tuple, str

name

Bottle

str

type

biosphere

str

technosphere

str

production

str

amount

1

float

Reference flow / Quantitative reference / Output

input

My_little_database, cd154d8f-0694-43b2-b4ab-e44101e122bd

tuple, str

name

Bad stuff

str

type

biosphere

str

technosphere

str

production

str

amount

3

float

Output

input

My_little_database, 3355a1b9-8fbf-40de-b449-ea6399a8a323

float, str

name

Stainless steel

str

type

biosphere

str

technosphere

str

production

str

amount

1

float

Input

input

My_little_database, 62714200-1a0d-43fb-9b48-99df3f233c94

float, str

name

Plastic

str

type

biosphere

str

technosphere

str

production

str

amount

1

float

Input

Flows (dictionary)

My_little_database,
62714200-1a0d-43fb-9b48-99df3f233c94

categoryTechnosphere flows, Manufacturers

list, str

locationDJ

str

namePlastic

str

unitkg

str

type

biosphere

str

product

str

process

str

My_little_database,
3355a1b9-8fbf-40de-b449-ea6399a8a323

categoryTechnosphere flows, Manufacturers

list, str

locationDJ

str

nameStainless steel

str

unitkg

str

type

biosphere

str

product

str

process

str

My_little_database,
b806c2cd-d563-43c4-a0c9-9c7dd5d513d3

categoryTechnosphere flows, Assemblers

list, str

locationDJ

str

nameBottle

str

unit

number of items

str

type

biosphere

str

product

str

process

str

My_little_database,
7528830a-7344-43be-b484-ac4dc625f272

categoryElementary flows, resources

list, str

locationDJ

str

nameVirgin metals

str

unitkg

str

type

biosphere

str

product

str

process

str

My_little_database,
8849be54-1b13-4d7e-85f6-2297817333f2

categoryElementary flows, resources

list, str

locationDJ

str

nameCrude oil

str

unitkg

str

type

biosphere

str

product

str

process

str

My_little_database,
cd154d8f-0694-43b2-b4ab-e44101e122bd

categoryElementary flows, emissions

list, str

locationDJ

str

nameBad stuff

str

unitkg

str

type

biosphere

str

product

str

process

str

LCIA methods

myLCIAdata

list

My_little_database,
cd154d8f-0694-43b2-b4ab-e44101e122bd

tuple, str

2.0 Characterization factor, number or uncertainty dictionary

DJ Location, if none give 'GLO' as default

method_key

tuple, str

MacIM Name of the method and level indicator, e.g. 'ReCiPe Midpoint'

Global warming Normally, this is the impact category, e.g. 'Climate change'

total Characterization factor (e.g. GWP, global warming potential)

BW2 LCA Command lines

Functional unit definition

functional_unit = {db.search('Bottle')[0]: 5.0}

Writing the LCIA method dictionary

myLCIAdata = [[(u'My_little_database', u'cd154d8f-0694-43b2-b4ab-e44101e122bd'), \n2, u'GLO']]\nmethod_key = ('MacIM', 'Global warming', 'total')\nmy_method = bw.Method(method_key)\nmy_method.validate(myLCIAdata)\nmy_method.register()\nmy_method.write(myLCIAdata)

Running the LCA

lca = bw.LCA(functional_unit, method_key)\nlca.lci()\nlca.lcia()\nlca.score

Legend

Process 1

Exchange flow

Process 2

Exchange flow

Process

Exchange flow

Process

Exchange flow

Exchange flow - - -> Activity flow

Cheatsheet

biosphere positive number --> output

biosphere negative number --> input

technosphere positive number --> input

production positive number --> output