

# Calculation for ammonia emissions with Agrammon

## 1 Information on the user and the dataset

**Dataset:** TestSingle6  
**Username:** fritz.zaucker@oetiker.ch  
**Version:** Single

## 2 Results of the emission calculation

### 2.1 Livestock

Grazing	11.21	kg N/year
Housing and Yard	99.42	kg N/year
Storage	20.80	kg N/year
Liquid	20.80	kg N/year
Solid	0.00	kg N/year
Application	552.11	kg N/year
Liquid	552.11	kg N/year
Solid	0.00	kg N/year
Total	683.56	kg N/year

### 2.2 Plant production

Mineral fertiliser	0.00	kg N/year
Recycling fertiliser	1.56	kg N/year
Total	1.56	kg N/year

### 2.3 Total

Total	685.12	kg N/year
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## Notes on the results

- 2.302585092994046

### 3 Input parameters of the dataset

#### 3.1 Livestock::Dairy cows

<b>Staple 1</b>		
Milk yield per dairy cow	6500.00	kg/year
Proportion of animals receiving hay in summer	50.00	%
Proportion of animals receiving maize silage in summer	50.00	%
Proportion of animals receiving maize pellets in summer	0.00	%
Proportion of animals receiving maize silage in winter	0.00	%
Proportion of animals receiving grass silage in winter	0.00	%
Proportion of animals receiving maize pellets in winter	0.00	%
Proportion of animals receiving potatoes in winter	70.00	%
Proportion of animals receiving beets in winter	0.00	%
Amount of concentrates per animal and per day in summer	0.00	kg/day
Amount of concentrates per animal and per day in winter	0.00	kg/day
Animal category	Dairy cows	-
Number of animals	25.00	-
N excretion for dairy cows	Standard	kg N/year
Housing system	tied housing slurry	-
Number of available animal places	30.00	-
Mitigation options for loose housing systems	none	-
Additional emission mitigation measure for the housing (see column Help)	0	%
Duration of access to exercise yard over the year	200.00	days/year
Exercise yard	not available	-
Type of exercise yard	solid floor	-
Additional emission mitigation measure for the exercise yard	0	%
Grazing days per year	100.00	days/year
Grazing hours per day	8.00	hours/day

#### 3.2 Storage::Solid manure

Share of poultry manure applied to land without storage	0.00	%
Share of poultry manure covered during storage	0.00	%
Additional emission mitigation measure	0	%
Share of cattle manure applied to land without storage	0.00	%
Share of cattle manure covered during storage	100.00	%
Additional emission mitigation measure for cattle manure storage	0	%
Share of pig manure applied to land without storage	0.00	%
Share of pig manure covered during storage	0.00	%
Additional emission mitigation measure for pig manure storage	0	%

#### 3.3 Storage::Slurry

<b>G1</b>		
Type of cover	uncovered	-
Contains cattle slurry	yes	-
Contains pigs slurry	yes	-
Additional emission mitigation measure	0	%
Volume of slurry store (without channels and gutters)	10.00	m3
Depth of slurry store	1.00	m
Frequency of slurry mixing	3 to 6 times per year	-

#### 3.4 Application::Slurry

Share of slurry applied with splash plate	0.00	%
Share of slurry applied with trailing hose	100.00	%
Share of slurry applied with trailing shoe	0.00	%
Share of slurry applied with shallow injection	0.00	%
Share of slurry applied with deep injection	0.00	%
Dilution of slurry (liters of water added to one liter of fresh excreta)	3.00	1:x
Mean dose per application	12.00	m3/ha
Share of slurry applied in the evening after 18:00	0.00	%
Frequency of slurry applied on hot days	frequently	-
Share of slurry applied June to August (in %)	50.00	%
Share of slurry applied September to May (in %)	50.00	%
Share of anaerobically digested slurry	0.00	%
Additional emission mitigation measure	0	%

### 3.5 Application::Solid manure

Share of solid manure incorporated within 1 hour (in %)	0.00	%
Share of solid manure incorporated within 4 hours (in %)	0.00	%
Share of solid manure incorporated within 8 hours (in %)	100.00	%
Share of solid manure incorporated within 1 day (in %)	0.00	%
Share of solid manure incorporated within 3 days (in %)	100.00	%
Share of solid manure incorporated more than 3 days (in %)	0.00	%
Share of solid manure not incorporated (in %)	0.00	%
Share of solid manure applied June to August (in %)	100.00	%
Share of solid manure applied September to May (in %)	0.00	%
Additional emission mitigation measure	0	%

### 3.6 Plant production::Mineral fertiliser

Soil pH value	unknown soil pH	-
Ammonium nitrate: amount used	0	kg fertilizer/year
Ammonium nitrate: N-content	27	%
Calcium ammonium nitrate: amount used	0	kg fertilizer/year
Calcium ammonium nitrate: N-content	20	%
Ammonium sulphate: amount used	0	kg fertilizer/year
Ammonium sulphate: N-content	21	%
Urea: amount used	0	kg fertilizer/year
Urea: N-content	46	%
Sulfamide: amount used	0	kg fertilizer/year
Sulfamide: N-content	30	%
Calcium nitrate: amount used	0	kg fertilizer/year
Calcium nitrate: N-content	15.50	%
Calcium cyanamide: amount used	0	kg fertilizer/year
Calcium cyanamide: N-content	20	%
Entec 26% + 13S: amount used	0	kg fertilizer/year
Entec 26% + 13S: N-content	26	%
NP fertilizer: amount used	0	kg fertilizer/year
NP fertilizer: N-content	15	%
NK fertilizer: amount used	0	kg fertilizer/year
NK fertilizer: N-content	11.50	%
NPK fertilizer: amount used	0	kg fertilizer/year
NPK fertilizer: N-content	12.50	%
Entec as NP, NPK, with/without Mg, S or micronutrients: amount used	0	kg fertilizer/year
Entec as NP, NPK, with/without Mg, S or micronutrients: N-content	18.50	%
Other nitrogen N fertilizer: amount used	0	kg fertilizer/year
Other nitrogen N fertilizer: N-content	0	%

### 3.7 Plant production::Recycling fertiliser

Amount of compost (in t fresh matter per year)	1.00	t/year
Amount of solid digestate from anaerobic digestion plants (in t fresh matter per year)	2.00	t/year
Amount of liquid digestate/presswater from anaerobic digestion plants	1.00	m3/year