

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **17**
- SRM **3.5**

Batch size

- Expected quantity of finished beer **33.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **35.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **42.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.3 liter(s)**
- Total mash volume **33.8 liter(s)**

Steps

- Temp **65 C**, Time **30 min**
- Temp **55 C**, Time **20 min**
- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **25.3 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **60 min** at **64C**
- Keep mash **30 min** at **65C**
- Keep mash **1 min** at **78C**
- Sparge using **25.6 liter(s)** of **76C** water or to achieve **42.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.2 kg (49.7%)	81 %	4
Grain	Płatki owsiane	0.45 kg (5.3%)	85 %	3
Grain	Pszenica niesłodowana	3.8 kg (45%)	75 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	35 g	60 min	5.4 %
Boil	Saaz (Czech Republic)	30 g	20 min	3.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33x2	Ale	Dry	1 g	Safbrew

Extras

Type	Name	Amount	Use for	Time
Spice	kolendra	30 g	Boil	5 min

Spice	curacao	30 g	Boil	5 min
Spice	skurk słodkiej pomarańczy	30 g	Boil	5 min