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- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **35**
- SRM **3.2**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **8 %/h**
- Boil size **29.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.8 liter(s)**
- Total mash volume **21.6 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **66 C**, Time **60 min**

Mash step by step

- Heat up **16.8 liter(s)** of strike water to **56.6C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **60 min** at **66C**
- Sparge using **17.6 liter(s)** of **76C** water or to achieve **29.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.5 kg (93.8%)	81 %	4
Grain	Weyermann - Carapils	0.3 kg (6.3%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	25 g	60 min	13 %
Boil	Cascade	15 g	10 min	5.8 %
Aroma (end of boil)	Cascade	20 g	0 min	5.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	---