Munich helles - Lager jasny

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **17**
- SRM **3.9**
- Style **Munich Helles**

Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **5 %**
- Size with trub loss **63 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **75.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **42 liter(s)**
- Total mash volume **56 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **42 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **47.9 liter(s)** of **76C** water or to achieve **75.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	12 kg *(85.7%)*	82 %	4
Grain	Strzegom Wiedeński	2 kg *(14.3%)*	79 %	10

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	30 g	60 min	11.2 %
Aroma (end of boil)	Oktawia	30 g	15 min	7.1 %
Aroma (end of boil)	Oktawia	90 g	0 min	7.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
34/70	Lager	Dry	40 g	---