Munich Helles

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **16**
- SRM **4.5**
- Style **Munich Helles**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	3.5 kg *(77.8%)*	80 %	4
Grain	Strzegom Monachijski typ I	1 kg *(22.2%)*	79 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Northern Brewer	15 g	60 min	9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Gozdawa German Lager W35	Lager	Dry	10 g	---