

munich hell yes! v.2

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **19**
- SRM **3.5**
- 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 **3.9 liter(s) / kg**
- Mash size **17.9 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **66 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **76 C**, Time **1 min**

Mash step by step

- Heat up **17.9 liter(s)** of strike water to **71.9C**
- Add grains
- Keep mash **20 min** at **66C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.6 kg (100%)	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Hallertau Tradition	30 g	60 min	5 %
Aroma (end of boil)	Saaz (Czech Republic)	20 g	5 min	3.4 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP830 - German Lager Yeast	Lager	Liquid	1200 ml	---
Lutra OYL-071	Ale	Slant	200 ml	Omega