

Monachijskie jasne

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **22**
- SRM **3.4**
- Style **Munich Helles**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.1 liter(s)**
- Total mash volume **18.8 liter(s)**

Steps

- Temp **68 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **14.1 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **45 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **18.2 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.5 kg (95.7%)	80 %	4
Grain	Weyermann - Carapils	0.2 kg (4.3%)	78 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	60 g	5 min	12.1 %
Boil	Hallertau Mittelfruh	30 g	10 min	4.5 %
Boil	Hallertau Mittelfruh	10 g	10 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
WLP860-O	Lager	Liquid	35 ml	White Labs