

OSLO PILS

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **35**
- SRM **4.4**
- Style **Bohemian Pilsener**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **67 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.1 liter(s)**

Steps

- Temp **64 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **70.7C**
- Add grains
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **14.1 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4.61 kg (85.8%)	80 %	4
Grain	Strzegom Monachijski typ I	0.21 kg (3.9%)	79 %	16
Grain	Weyermann - Carapils	0.38 kg (7.1%)	78 %	4
Grain	Strzegom Monachijski typ II	0.17 kg (3.2%)	79 %	22

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	80 min	7.3 %
Boil	Saaz (Czech Republic)	25 g	25 min	4.5 %
Aroma (end of boil)	Saaz (Czech Republic)	25 g	1 min	4.5 %