Polski lager

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **19**
- SRM **3.1**
- Style **Classic American Pilsner**

Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Steps

- Temp **62 C**, Time **50 min**
- Temp **70 C**, Time **30 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **30 min** at **70C**
- Sparge using **20.4 liter(s)** of **76C** water or to achieve **32.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg *(80%)*	81 %	4
Grain	Weyermann - Carapils	0.5 kg *(10%)*	78 %	4
Grain	Pszeniczny	0.5 kg *(10%)*	85 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	18 g	60 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	30 g	5 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Liquid	250 ml	Fermentum Mobile