

Polski Lager

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **20**
- SRM **4.4**
- Style **Standard American Lager**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (83.3%)	81 %	4
Grain	Monachijski	1 kg (16.7%)	80 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Aroma (end of boil)	Lublin (Lubelski)	10 g	15 min	4 %
Aroma (end of boil)	Lublin (Lubelski)	10 g	5 min	4 %
Dry Hop	Lublin (Lubelski)	10 g	5 day(s)	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Saflager S-189	Lager	Dry	11.5 g	Fermentis