

PatoLager

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **35**
- SRM **4.7**
- Style **Standard American Lager**

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 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **56 C**, Time **15 min**
- Temp **68 C**, Time **45 min**
- Temp **76 C**, Time **15 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **62C**
- Add grains
- Keep mash **15 min** at **56C**
- Keep mash **45 min** at **68C**
- Keep mash **15 min** at **76C**
- Sparge using **15.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------|------------|-------|-----|
| Grain | Pilzneński | 4 kg (80%) | 81 % | 4 |
| Grain | Monachijski | 1 kg (20%) | 80 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil | Sladek | 50 g | 60 min | 6 % |
| Aroma (end of boil) | Saaz (Czech Republic) | 10 g | 10 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Fermentis W34-70 | Lager | Dry | 11.5 g | Fermentis |