

Polski lager

- Gravity **10 BLG**
- ABV **4 %**
- IBU **20**
- SRM **3.5**
- 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 **55 min**
- Temp **70 C**, Time **20 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **55 min** at **62C**
- Keep mash **20 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 | Żytni | 0.5 kg (10%) | 85 % | 8 |
| Grain | Strzegom Wiedeński | 0.5 kg (10%) | 79 % | 10 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------------|--------|--------|------------|
| Boil | Nadwiślański | 25 g | 65 min | 8 % |
| Aroma (end of boil) | Izabella | 50 g | 1 min | 5 % |
| Whirlpool | Izabella | 50 g | 0 min | 5.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------|-------|-------|--------|------------|
| lalemand lager | Lager | Slant | 300 ml | --- |