

Pils Browar Jana

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **26**
- SRM **4.5**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **2 %**
- Size with trub loss **22.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **21 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **27.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------|----------------|-------|-----|
| Grain | Pilzneński | 4 kg (76.2%) | 81 % | 4 |
| Grain | Monachijski | 1 kg (19%) | 80 % | 16 |
| Grain | karmelowy | 0.25 kg (4.8%) | --- % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------------------|--------|--------|------------|
| Boil | Magnat | 10 g | 60 min | 11.2 % |
| Boil | Magnat | 10 g | 40 min | 11.2 % |
| Boil | Sybilla | 10 g | 30 min | 3.5 % |
| Aroma (end of boil) | Saaz (Czech Republic) | 15 g | 5 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Fermentis W34/70 | Lager | Dry | 23 g | --- |
| Dwie saszetki | | | | |