

Szybki pils na odpi...

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **20**
- SRM **4.4**
- Style **German Pilsner (Pils)**

Batch size

- Expected quantity of finished beer **28 liter(s)**
- Trub loss **5 %**
- Size with trub loss **29.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **35.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.4 liter(s)**
- Total mash volume **27.2 liter(s)**

Steps

- Temp **54 C**, Time **15 min**
- Temp **67 C**, Time **45 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **20.4 liter(s)** of strike water to **59.7C**
- Add grains
- Keep mash **15 min** at **54C**
- Keep mash **45 min** at **67C**
- Keep mash **10 min** at **75C**
- Sparge using **21.8 liter(s)** of **76C** water or to achieve **35.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|----------------|-------|-----|
| Grain | Weyermann - Bohemian Pilsner Malt | 5.8 kg (85.3%) | 81 % | 4 |
| Grain | Monachijski | 1 kg (14.7%) | 80 % | 16 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|-----------------------|--------|--------|------------|
| Boil | Marynka | 25 g | 60 min | 8.8 % |
| Whirlpool | Saaz (Czech Republic) | 35 g | 15 min | 4 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|-------|------|--------|------------|
| Saflager W 34/70 | Lager | Dry | 23 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------------|--------|---------|--------|
| Fining | Mech irlandzki | 5 g | Boil | 20 min |
| Water Agent | Kwas mlekowy | 4 g | Mash | 5 min |

| | | | | |
|----------------------|------|-----|------|--------|
| Wysładzanie 9 L wody | | | | |
| Water Agent | Gips | 3 g | Mash | 60 min |