

Groszkowe #10 (Vermelho) - Browar na Wyżynie

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **37**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **4 %**
- Size with trub loss **23.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.8 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 **66 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------------|--------------|-------|-----|
| Grain | pilzneński Soufflet | 1 kg (20%) | 80 % | 4 |
| Grain | pilzneński 2RS Castle Malting | 3 kg (60%) | 81 % | 4 |
| Grain | monachijski typ II Viking Malt | 0.5 kg (10%) | 78 % | 22 |
| Grain | pszeniczny Castle Malting | 0.5 kg (10%) | 83 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|------------|--------------------------|--------|----------|------------|
| First Wort | Vermelho (Polishhops) | 20 g | 100 min | 9.5 % |
| Boil | Vermelho (Polishhops) | 20 g | 20 min | 9.5 % |
| Whirlpool | Vermelho (Polishhops) | 60 g | 0 min | 9.5 % |
| Dry Hop | Vermelho (Polishhops) | 100 g | 3 day(s) | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|--------|------------------|
| FM52 Amerykański Sen | Ale | Slant | 200 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|----------------------------------|--------|---------|--------|
| Water Agent | siarczan wapnia | 5 g | Mash | 60 min |
| Water Agent | chlerek wapnia | 5 g | Mash | 60 min |
| Water Agent | kw. fosforowy 75% zacier | 4 g | Mash | 60 min |
| Water Agent | kw. fosforowy 75% wysładzanie | 2 g | Mash | 60 min |
| Fining | Mech irlandzki | 2 g | Boil | 15 min |
| Other | siarczan cynku | 2 g | Boil | 0 min |