

## Groszkowe #2 - Polskie Pale Ale - Browar na Wyżynie

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **30**
- SRM **4**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

### Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **6 %**
- Size with trub loss **18 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **21.6 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **14 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **11.6 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

### Fermentables

| Type  | Name                   | Amount       | Yield | EBC |
|-------|------------------------|--------------|-------|-----|
| Grain | pilzneński Viking Malt | 3.8 kg (95%) | 80 %  | 5   |
| Grain | pszeniczny Viking Malt | 0.2 kg (5%)  | 81 %  | 5   |

### Hops

| Use for             | Name                    | Amount | Time     | Alpha acid |
|---------------------|-------------------------|--------|----------|------------|
| Boil                | Chinook (PL) - granulát | 5 g    | 60 min   | 10 %       |
| Boil                | Chinook (PL) - granulát | 20 g   | 20 min   | 10 %       |
| Aroma (end of boil) | Chinook (PL) - granulát | 20 g   | 7 min    | 10 %       |
| Whirlpool           | Chinook (PL) - granulát | 20 g   | 0 min    | 10 %       |
| Dry Hop             | Chinook (PL) - granulát | 35 g   | 7 day(s) | 10 %       |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11 g   | Fermentis  |

## Notes

- Chmilenie whirlpool przy 80C przez 15 minut.  
*Jul 11, 2017, 2:49 PM*