

## The Dealer Brokreacja 3

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **17**
- SRM **4.9**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **15.7 liter(s)**
- Total mash volume **20.4 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **15.7 liter(s)** of strike water to **75.3C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                      | Amount         | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 4 kg (84.2%)   | 85 %  | 7   |
| Grain | Platki owsiane            | 0.4 kg (8.4%)  | 85 %  | 3   |
| Grain | Monachijski               | 0.35 kg (7.4%) | 80 %  | 16  |

### Hops

| Use for   | Name                   | Amount | Time     | Alpha acid |
|-----------|------------------------|--------|----------|------------|
| Boil      | Columbus/Tomahawk/Zeus | 10 g   | 60 min   | 15.8 %     |
| Whirlpool | Cascade                | 25 g   | 0 min    | 5.5 %      |
| Whirlpool | Citra                  | 25 g   | 0 min    | 14.2 %     |
| Dry Hop   | exuanot                | 35 g   | 7 day(s) | 14 %       |
| Dry Hop   | Cascade                | 25 g   | 7 day(s) | 5.5 %      |
| Dry Hop   | Citra                  | 10 g   | 7 day(s) | 14.2 %     |

### Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11.5 g | ---        |