

## Zimorodek 2.1

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **20**
- SRM **9.8**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

### Batch size

- Expected quantity of finished beer **47 liter(s)**
- Trub loss **5 %**
- Size with trub loss **49.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **59.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **32.5 liter(s)**
- Total mash volume **45.5 liter(s)**

### Steps

- Temp **6 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **55 C**, Time **20 min**

### Mash step by step

- Heat up **32.5 liter(s)** of strike water to **3.2C**
- Add grains
- Keep mash **60 min** at **6C**
- Keep mash **20 min** at **55C**
- Keep mash **20 min** at **72C**
- Sparge using **39.9 liter(s)** of **76C** water or to achieve **59.4 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 11 kg (84.6%) | 80 %  | 5   |
| Grain | Karmelowy Czerwony   | 1 kg (7.7%)   | 75 %  | 150 |
| Grain | Biscuit Malt         | 1 kg (7.7%)   | 79 %  | 45  |

### Hops

| Use for             | Name               | Amount | Time   | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil                | Marynka            | 25 g   | 60 min | 7.9 %      |
| Boil                | East Kent Goldings | 50 g   | 10 min | 4.6 %      |
| Aroma (end of boil) | Galaxy             | 50 g   | 0 min  | 17.9 %     |
| Boil                | Galaxy             | 50 g   | 5 min  | 17.9 %     |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 23 g   | Fermentis  |

### Notes

- Brzeczka 21.11

Mech irlandzki 15

Blg start 13

Gaz 2,2

*Nov 21, 2024, 9:11 AM*