

## Działkowe IPA (Castle Pale Ale)

- Gravity **12.1 BLG**
- ABV ---
- IBU **36**
- SRM **6.3**
- Style **American IPA**

### 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **17.6 liter(s)**

### Steps

- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **77 C**, Time **10 min**

### Mash step by step

- Heat up **13.2 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Castle Pale Ale            | 3.7 kg (84.1%) | 80 %  | 8   |
| Grain | Caramunich® typ I          | 0.2 kg (4.5%)  | 73 %  | 80  |
| Grain | Weyermann pszeniczny jasny | 0.5 kg (11.4%) | 80 %  | 6   |

### Hops

| Use for             | Name       | Amount | Time     | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil                | Simcoe     | 10 g   | 50 min   | 13.2 %     |
| Boil                | Simcoe     | 15 g   | 20 min   | 13.2 %     |
| Aroma (end of boil) | Cascade DE | 20 g   | 10 min   | 7.1 %      |
| Dry Hop             | Cascade DE | 80 g   | 7 day(s) | 7.1 %      |

### Yeasts

| Name                          | Type | Form   | Amount | Laboratory |
|-------------------------------|------|--------|--------|------------|
| WLP001 - California Ale Yeast | Ale  | Liquid | 40 ml  | White Labs |

### Extras

| Type   | Name       | Amount | Use for | Time   |
|--------|------------|--------|---------|--------|
| Fining | Irish Moss | 5 g    | Boil    | 10 min |