

## Ostatnie US-05 10.06.2025r

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **49**
- SRM **8.8**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **25 %/h**
- Boil size **30.8 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **16.6 liter(s)**
- Total mash volume **21.4 liter(s)**

### Steps

- Temp **63 C**, Time **20 min**
- Temp **67 C**, Time **40 min**
- Temp **75 C**, Time **5 min**

### Mash step by step

- Heat up **16.6 liter(s)** of strike water to **69.2C**
- Add grains
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **67C**
- Keep mash **5 min** at **75C**
- Sparge using **19 liter(s)** of **76C** water or to achieve **30.8 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4.5 kg (94.7%) | 80 %  | 5   |
| Grain | Strzegom Karmel 300  | 0.25 kg (5.3%) | 70 %  | 299 |

### Hops

| Use for             | Name                   | Amount | Time   | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 25 g   | 60 min | 13.9 %     |
| Aroma (end of boil) | Saaz Polska            | 30 g   | 10 min | 4.1 %      |
| Aroma (end of boil) | Centennial             | 10 g   | 5 min  | 8.5 %      |
| Aroma (end of boil) | Superdelic             | 30 g   | 5 min  | 9.9 %      |

### Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 200 ml | Fermentis  |

### Extras

| Type   | Name        | Amount | Use for | Time  |
|--------|-------------|--------|---------|-------|
| Fining | Whirlfloc T | 1 g    | Boil    | 5 min |