

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **70**
- SRM **27.4**
- Style **American Amber Ale**

### Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **15.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.375 liter(s) / kg**
- Mash size **12.5 liter(s)**
- Total mash volume **16.2 liter(s)**

### Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **12.5 liter(s)** of strike water to **70.5C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **7.1 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

### Fermentables

| Type  | Name                           | Amount         | Yield | EBC  |
|-------|--------------------------------|----------------|-------|------|
| Grain | Viking Pale Ale malt           | 2.5 kg (67.4%) | 80 %  | 5    |
| Grain | VM Pale Cookie                 | 0.35 kg (9.4%) | 79 %  | 30   |
| Grain | Płatki owsiane                 | 0.3 kg (8.1%)  | 85 %  | 3    |
| Grain | Monachijski                    | 0.13 kg (3.5%) | 80 %  | 16   |
| Grain | Pszeniczny                     | 0.13 kg (3.5%) | 85 %  | 4    |
| Grain | Strzegom Karmel 150            | 0.1 kg (2.7%)  | 75 %  | 150  |
| Grain | Weyermann - Carafa III Special | 0.2 kg (5.4%)  | 35 %  | 1300 |

### Hops

| Use for   | Name   | Amount | Time     | Alpha acid |
|-----------|--------|--------|----------|------------|
| Boil      | Galaxy | 15 g   | 60 min   | 15.5 %     |
| Boil      | Galaxy | 15 g   | 5 min    | 15.5 %     |
| Whirlpool | Galaxy | 30 g   | 20 min   | 15.5 %     |
| Dry Hop   | Galaxy | 60 g   | 3 day(s) | 15.5 %     |