

## Siatka i Łatka

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **17**
- SRM **41.6**
- Style **Foreign Extra Stout**

### 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 **3 liter(s) / kg**
- Mash size **40.5 liter(s)**
- Total mash volume **54 liter(s)**

### Steps

- Temp **55 C**, Time **10 min**
- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **20 min**

### Mash step by step

- Heat up **40.5 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **10 min** at **55C**
- Keep mash **60 min** at **65C**
- Keep mash **20 min** at **72C**
- Sparge using **32.4 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       | 5 kg (37%)    | 80 %  | 5    |
| Grain | Strzegom Monachijski typ I | 2 kg (14.8%)  | 79 %  | 16   |
| Grain | Pszeniczny ciemny          | 1 kg (7.4%)   | 85 %  | 4    |
| Grain | Carared                    | 1 kg (7.4%)   | 75 %  | 39   |
| Grain | Crystal Red                | 1 kg (7.4%)   | 70 %  | 400  |
| Grain | Special B Castle           | 1 kg (7.4%)   | 70 %  | 350  |
| Grain | Black (Patent) Malt        | 0.5 kg (3.7%) | 55 %  | 1350 |
| Grain | Czekoladowy                | 0.5 kg (3.7%) | 60 %  | 1200 |
| Grain | Karmelowy Czerwony         | 1 kg (7.4%)   | 75 %  | 59   |
| Grain | Pale cara                  | 0.5 kg (3.7%) | 80 %  | 9    |

### Hops

| Use for | Name               | Amount | Time   | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil    | Marynka            | 25 g   | 60 min | 8.8 %      |
| Boil    | Lublin (Lubelski)  | 50 g   | 10 min | 3.8 %      |
| Boil    | East Kent Goldings | 100 g  | 5 min  | 4.6 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 23 g   | ---        |

## Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 11 g   | Boil    | 10 min |