

# Świąteczny Stout

- Gravity **23.1 BLG**
- ABV **10.5 %**
- IBU **26**
- SRM **38.7**

## 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 **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.6 liter(s)**
- Total mash volume **38.2 liter(s)**

## Fermentables

| Type  | Name                   | Amount         | Yield  | EBC  |
|-------|------------------------|----------------|--------|------|
| Grain | Briess - Pale Ale Malt | 6 kg (59.7%)   | 80 %   | 7    |
| Grain | Monachijski            | 2 kg (19.9%)   | 80 %   | 16   |
| Grain | Weyermann - Carafa II  | 0.35 kg (3.5%) | 70 %   | 1100 |
| Grain | Jęczmień palony        | 0.2 kg (2%)    | 55 %   | 985  |
| Grain | Caraaroma              | 0.5 kg (5%)    | 78 %   | 350  |
| Sugar | Milk Sugar (Lactose)   | 0.5 kg (5%)    | 76.1 % | 0    |
| Grain | Płatki owsiane         | 0.5 kg (5%)    | 85 %   | 3    |

## Hops

| Use for | Name               | Amount | Time   | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil    | East Kent Goldings | 40 g   | 60 min | 5.1 %      |
| Boil    | East Kent Goldings | 50 g   | 20 min | 5.1 %      |

## Extras

| Type   | Name                 | Amount | Use for | Time   |
|--------|----------------------|--------|---------|--------|
| Spice  | przprawa do piernika | 40 g   | Boil    | 30 min |
| Flavor | skórka pomarańczy    | 10 g   | Boil    | 15 min |
| Flavor | laska wanili         | 10 g   | Boil    | 15 min |
| Spice  | jałowiec             | 10 g   | Boil    | 15 min |
| Spice  | chili                | 5 g    | Boil    | 15 min |