

# Ciemniak

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- Gravity **11.7 BLG**
- ABV ---
- IBU **27**
- SRM **16.8**
- Style **Doppelbock**

## 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 **14.3 liter(s)**
- Total mash volume **19 liter(s)**

## Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale   | 3 kg (63.2%)   | 79 %  | 6   |
| Grain | Red crystal         | 0.5 kg (10.5%) | 78 %  | 400 |
| Grain | Caramunich® typ I   | 0.25 kg (5.3%) | 73 %  | 90  |
| Grain | Strzegom Pilzneński | 1 kg (21.1%)   | 80 %  | 4   |

## Hops

| Use for | Name             | Amount | Time   | Alpha acid |
|---------|------------------|--------|--------|------------|
| Boil    | Marynka          | 10 g   | 45 min | 8.8 %      |
| Boil    | Lubelski         | 10 g   | 15 min | 4 %        |
| Boil    | Mosaic           | 10 g   | 15 min | 12 %       |
| Boil    | Citra            | 10 g   | 15 min | 13.5 %     |
| Boil    | Warrior Queen UK | 5 g    | 10 min | 6.3 %      |