

# Czarny Wilk

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- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **34**
- SRM **41.7**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

## Fermentables

| Type  | Name                        | Amount        | Yield | EBC  |
|-------|-----------------------------|---------------|-------|------|
| Grain | Viking Pale Ale malt        | 3 kg (57.7%)  | 80 %  | 5    |
| Grain | Strzegom Monachijski typ II | 1 kg (19.2%)  | 79 %  | 22   |
| Grain | Karmelowy żytni Strzegom    | 0.5 kg (9.6%) | 75 %  | 150  |
| Grain | Strzegom Czekoladowy ciemny | 0.4 kg (7.7%) | 68 %  | 1200 |
| Grain | Strzegom Barwiący           | 0.3 kg (5.8%) | 68 %  | 1300 |

## Hops

| Use for | Name  | Amount | Time   | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil    | lunga | 35 g   | 55 min | 9 %        |
| Boil    | lunga | 19 g   | 5 min  | 9 %        |

## Yeasts

| Name                      | Type | Form   | Amount  | Laboratory       |
|---------------------------|------|--------|---------|------------------|
| FM13 Irlandzkie Ciemności | Ale  | Liquid | 1000 ml | Fermentum Mobile |