

Belgijska Czarna Dziura

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **23**
- SRM **30.5**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **16.3 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **16.3 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **22.1 liter(s)** of **76C** water or to achieve **31.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (61.5%) | 80 % | 5 |
| Grain | Pszeniczny | 1 kg (15.4%) | 85 % | 4 |
| Grain | Żytni | 0.5 kg (7.7%) | 85 % | 8 |
| Grain | Fawcett - Pale Chocolate | 0.7 kg (10.8%) | 71 % | 600 |
| Grain | Jęczmień palony | 0.3 kg (4.6%) | 55 % | 985 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 30 g | 40 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safbrew T-58 | Ale | Slant | 300 ml | Fermentis |