

Czarno to widzę 2 (Dry Stout)

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **37**
- SRM **37**
- 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 **17.5 liter(s)**
- Total mash volume **24.5 liter(s)**

Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **17.5 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **21.4 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 | 5 kg (71.4%) | 80 % | 5 |
| Grain | Pszeniczny | 1 kg (14.3%) | 85 % | 4 |
| Grain | Strzegom Czekoladowy ciemny | 0.6 kg (8.6%) | 68 % | 1200 |
| Grain | Fawcett - Pale Chocolate | 0.4 kg (5.7%) | 71 % | 600 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 30 g | 50 min | 15.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|-------|-------|--------|------------------|
| FM41 Gwoździe i Banany | Wheat | Slant | 300 ml | fermentum mobile |