

Dark side

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **30**
- SRM **32.3**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.8 liter(s)**
- Total mash volume **18.4 liter(s)**

Steps

- Temp **68 C**, Time **60 min**

Mash step by step

- Heat up **13.8 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 3 kg (65.2%) | 85 % | 7 |
| Grain | Strzegom Karmel 150 | 1 kg (21.7%) | 75 % | 150 |
| Grain | Carafa II | 0.2 kg (4.3%) | 70 % | 812 |
| Grain | Jęczmień palony | 0.15 kg (3.3%) | 55 % | 985 |
| Grain | Płatki owsiane | 0.25 kg (5.4%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-------|--------|--------|------------|
| Boil | lunga | 20 g | 60 min | 11 % |

Extras

| Type | Name | Amount | Use for | Time |
|-------|-----------------|--------|-----------|----------|
| Spice | Ziarno kakaowca | 40 g | Secondary | 7 day(s) |