

Sadza

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **19**
- SRM **28.3**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **50 liter(s)**
- Trub loss **5 %**
- Size with trub loss **52.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **63.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **39 liter(s)**
- Total mash volume **52 liter(s)**

Steps

- Temp **67 C**, Time **100 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **39 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **100 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **37.3 liter(s)** of **76C** water or to achieve **63.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 8 kg (61.5%) | 80 % | 5 |
| Grain | Jęczmień niesłodowany | 3 kg (23.1%) | 75 % | 2 |
| Grain | Jęczmień palony | 0.5 kg (3.8%) | 55 % | 985 |
| Grain | Weyermann - Chocolate Wheat | 1 kg (7.7%) | 74 % | 788 |
| Grain | Żytni czekoladowy | 0.5 kg (3.8%) | --- % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil | East Kent Goldings | 80 g | 60 min | 5.1 % |
| Boil | Sybilla | 20 g | 10 min | 3.5 % |