

Zwooo

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **21**
- SRM **36**
- Style **Sweet 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 **83 %**
- Liquor-to-grist ratio **4.5 liter(s) / kg**
- Mash size **18.1 liter(s)**
- Total mash volume **22.1 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------|----------------|--------|------|
| Grain | Viking Pale Ale malt | 3 kg (59.8%) | 80 % | 5 |
| Grain | Strzegom Czekoladowy ciemny | 0.5 kg (10%) | 68 % | 1200 |
| Grain | Weyermann - Melanoiden Malt | 0.25 kg (5%) | 81 % | 53 |
| Grain | Jęczmień palony | 0.07 kg (1.4%) | 55 % | 985 |
| Grain | Castle Cafe | 0.2 kg (4%) | 75.5 % | 480 |
| Sugar | Milk Sugar (Lactose) | 1 kg (19.9%) | 76.1 % | 0 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------------------|--------|--------|------------|
| Boil | Hallertau Tradition | 50 g | 60 min | 4.2 % |