

SDS

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **59**
- SRM **7.5**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.5 liter(s)**
- Total mash volume **20.7 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **15.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------------------|-----------------|-------|-----|
| Grain | Słód Pilznieński Viking Malt 3,2-4,5 | 2 kg (38.7%) | 80 % | 4 |
| Grain | Słód Pale Ale strzegom | 1.72 kg (33.3%) | 79 % | 6 |
| Grain | Wędzony bukiem Viking Malt | 0.95 kg (18.4%) | 82 % | 10 |
| Grain | Palone ziarno jęczmienia | 0.5 kg (9.7%) | 70 % | 100 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Kazbek | 100 g | 45 min | 6.24 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| US-05 | Ale | Dry | 11.5 g | --- |