

wędzony staut

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **36**
- SRM **32.3**
- Style **Foreign Extra 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 **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **18.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|---------------|-------|------|
| Grain | Pilzneński | 4 kg (64.5%) | 81 % | 4 |
| Grain | Viking Malt Wędzony wiśnią | 1 kg (16.1%) | 82 % | 10 |
| Grain | Caraaroma | 0.3 kg (4.8%) | 78 % | 400 |
| Grain | Extra black | 0.3 kg (4.8%) | 65 % | 1400 |
| Grain | Weyermann - Carafa I | 0.2 kg (3.2%) | 70 % | 690 |
| Grain | Płatki pszeniczne | 0.4 kg (6.5%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 20 g | 60 min | 10 % |
| Boil | lunga | 20 g | 30 min | 10 % |
| Boil | Sybilla | 20 g | 15 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|-------|--------|------------|
| Safale S-04 | Ale | Slant | 120 ml | Safale |