

Dry Stout z Browamator + Warrior

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **31**
- SRM **21.5**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **11.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **14.7 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **7.8 liter(s)**
- Total mash volume **10.1 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **7.8 liter(s)** of strike water to **68.2C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **1 min** at **78C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **14.7 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|--|---------------------------|-----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 1.6 kg (69.6%) | 85 % | 7 |
| Grain | Płatki Jęczmienne | 0.25 kg (10.9%) | 85 % | 3 |
| Grain | Jęczmień palony | 0.15 kg (6.5%) | 55 % | 985 |
| Dodać w 60min zacierania na 76stopni C | | | | |
| Grain | Weyermann - Carafa II | 0.05 kg (2.2%) | 70 % | 837 |
| Dodać w 60min zacierania na 76stopni C | | | | |
| Grain | Płatki owsiane | 0.25 kg (10.9%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------|--------|--------|------------|
| Boil | Willamette | 30 g | 60 min | 5 % |
| Whirlpool | Warrior | 30 g | 0 min | 15.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |