

Foreign Extra

- Gravity **18.2 BLG**
- ABV ---
- IBU **37**
- SRM **39.9**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **19 liter(s)**
- Total mash volume **26.6 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **68 C**, Time **15 min**
- Temp **68 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **19 liter(s)** of strike water to **77.6C**
- Add grains
- Keep mash **15 min** at **68C**
- Keep mash **10 min** at **68C**
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Pale ale | 4.5 kg (59.2%) | 79 % | 7 |
| Grain | Wędzony bukiem | 1 kg (13.2%) | 80 % | 4 |
| Grain | Casle Malting Whisky Nature | 0.5 kg (6.6%) | 85 % | 4 |
| Grain | Czekoladowy | 0.3 kg (3.9%) | 68 % | 400 |
| Grain | Brown | 0.3 kg (3.9%) | 72 % | 190 |
| Grain | Pale Chocolate | 0.3 kg (3.9%) | 71 % | 600 |
| Grain | Płatki jęczmienne | 0.3 kg (3.9%) | 70 % | 4 |
| Grain | Jęczmień palony | 0.4 kg (5.3%) | 65 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------|--------|----------|------------|
| Boil | Target | 40 g | 60 min | 10.5 % |
| Dry Hop | Southern Promise | 50 g | 7 day(s) | 11 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|------|--------|------------|
| Danstar - Nottingham | Ale | Dry | 11 g | Danstar |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---------------|--------|-----------|----------|
| Fining | Irish Moss | 5 g | Boil | 10 min |
| Flavor | Płatki dębowe | 50 g | Secondary | 7 day(s) |

Notes

- Zacieranie:
 - *Pale Ale, Wędzony, płatki jęczmienne 60minut- 68°C
 - *Pale Chocolate, Chocolate 15minut- 68°C
 - *Jęczmień palony 10 minut- 68°C
 - *Mash Out- 5minut-78°C
- Apr 15, 2017, 11:18 AM*