

#3

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **39**
- SRM **3.9**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

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 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **65 C**, Time **60 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|-------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (100%) | 80 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|----------|------------|
| Boil | Mosaic | 25 g | 15 min | 10 % |
| Boil | Marynka | 25 g | 60 min | 10 % |
| Dry Hop | Mosaic | 75 g | 6 day(s) | 10 % |

Yeasts

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

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------------------|--------|-----------|----------|
| Spice | skórka grejpfruta | 10 g | Boil | 10 min |
| Fining | mech irlandzki | 5 g | Boil | 10 min |
| Flavor | płatki dębowe bourbon | 20 g | Secondary | 6 day(s) |
| Spice | skórka grejpfruta | 15 g | Secondary | 6 day(s) |
| Spice | skórka pomarańczy | 10 g | Boil | 10 min |

| | | | | |
|-------|-------------------|------|-----------|----------|
| Spice | skórka pomarańczy | 15 g | Secondary | 6 day(s) |
|-------|-------------------|------|-----------|----------|