

jarjar

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **28**
- SRM **6.6**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **22.1 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **16.4 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (79.4%) | 80 % | 5 |
| Grain | Abbey Castle | 0.5 kg (7.9%) | 80 % | 45 |
| Grain | Biscuit Malt | 0.5 kg (7.9%) | 79 % | 45 |
| Grain | Platki owsiane | 0.3 kg (4.8%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Fuggles | 30 g | 60 min | 5.3 % |
| Boil | Fuggles | 60 g | 15 min | 5.3 % |
| Boil | Fuggles | 60 g | 0 min | 5.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------------------|------|-------|--------|-------------|
| Wyeast - 1275 Thames Valley Ale | Ale | Slant | 200 ml | Wyeast Labs |