

Quadrupel

- Gravity **22.9 BLG**
- ABV **10.4 %**
- IBU **35**
- SRM **23.9**
- Style **Belgian Dark Strong Ale**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.6 liter(s)**
- Boil time **100 min**
- Evaporation rate **10 %/h**
- Boil size **25 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **32 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **24 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **25 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|--------|-----|
| Grain | Pilzneński | 5 kg (58.8%) | 81 % | 4 |
| Grain | Pilzneński 6-rzędowy | 2 kg (23.5%) | 80 % | 5 |
| Grain | Diastatyczny | 0.5 kg (5.9%) | 80 % | 4 |
| Grain | Special B | 0.5 kg (5.9%) | 70 % | 290 |
| Sugar | Cukier kandyzowany brązowy | 0.5 kg (5.9%) | 78.3 % | 400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Marynka | 50 g | 60 min | 8.8 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------|------|--------|--------|------------------|
| FM28 Habit opata | Ale | Liquid | 60 ml | Fermentum Mobile |