

Old Ale 1.0

- Gravity **19.1 BLG**
- ABV **8.3 %**
- IBU **41**
- SRM **22.2**
- Style **Old Ale**

Batch size

- Expected quantity of finished beer **17.5 liter(s)**
- Trub loss **3 %**
- Size with trub loss **18 liter(s)**
- Boil time **90 min**
- Evaporation rate **13 %/h**
- Boil size **24.9 liter(s)**

Mash information

- Mash efficiency **68 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

Steps

- Temp **63 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **40 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **13.1 liter(s)** of **76C** water or to achieve **24.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|----------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (53.3%) | 72 % | 5 |
| Grain | Karmelowy Czerwony | 0.5 kg (6.7%) | 72 % | 59 |
| Grain | Carahell | 0.5 kg (6.7%) | 72 % | 26 |
| Grain | Strzegom Karmel 150 | 0.4 kg (5.3%) | 72 % | 150 |
| Grain | Strzegom Czekoladowy jasny | 0.5 kg (6.7%) | 72 % | 400 |
| Adjunct | Płatki owsiane | 0.5 kg (6.7%) | 68 % | 3 |
| Adjunct | płatki żytnie | 0.4 kg (5.3%) | 68 % | 4 |
| Sugar | cukier muscavado | 0.7 kg (9.3%) | 90 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | Sybilla | 20 g | 60 min | 6 % |
| Boil | Perle | 30 g | 60 min | 7 % |
| Boil | Perle | 30 g | 15 min | 7 % |

Yeasts

Recipe has been printed via **BREWNES.com** - a complex online solution for homebrewers to track brewing process easily.

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|-------|--------|------------------|
| FM12 W szkocką kratę | Ale | Slant | 200 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|--------|---|--------|-----------|-----------|
| Flavor | płatki dębowe francuskie średnio opiekane | 50 g | Primary | 13 day(s) |
| Flavor | płatki dębowe amerykańskie średnio opiekane | 50 g | Secondary | 13 day(s) |