

Ale na FM51

- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **18**
- SRM **3**
- Style **Standard/Ordinary Bitter**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **30.9 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **5.9 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **29 liter(s)**

Steps

- Temp **68.5 C**, Time **90 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24.8 liter(s)** of strike water to **72.6C**
- Add grains
- Keep mash **90 min** at **68.5C**
- Keep mash **10 min** at **78C**
- Sparge using **10.3 liter(s)** of **76C** water or to achieve **30.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Pilzneński | 2.66 kg (63.3%) | 81 % | 4 |
| Grain | Viking Pale Ale malt | 1.2 kg (28.6%) | 80 % | 5 |
| Grain | Pszeniczny | 0.34 kg (8.1%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|--------|------------|
| Boil | Magnum | 10 g | 50 min | 10.5 % |
| Boil | Magnum | 10 g | 15 min | 10.5 % |
| Boil | Izabella | 10 g | 15 min | 5.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------|-------|-------|--------|------------------|
| FM51 Grodzie Dębowe | Wheat | Slant | 120 ml | Fermentum Mobile |