

# Belgian Dubbel

- Gravity **17.5 BLG**
- ABV **7.5 %**
- IBU **20**
- SRM **15.8**
- Style **Belgian Dubbel**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **110 min**
- Evaporation rate **10 %/h**
- Boil size **29.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **24.2 liter(s)**

## Steps

- Temp **68 C**, Time **0 min**
- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

## Mash step by step

- Heat up **18.2 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **0 min** at **68C**
- Keep mash **10 min** at **72C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

## Fermentables

| Type  | Name              | Amount         | Yield  | EBC |
|-------|-------------------|----------------|--------|-----|
| Grain | Pilzneński        | 5 kg (70.9%)   | 81 %   | 4   |
| Grain | Monachijski       | 0.4 kg (5.7%)  | 80 %   | 16  |
| Grain | Special B Malt    | 0.3 kg (4.3%)  | 65.2 % | 315 |
| Grain | Biscuit Malt      | 0.2 kg (2.8%)  | 79 %   | 45  |
| Grain | Caramunich® typ I | 0.15 kg (2.1%) | 73 %   | 80  |
| Sugar | Brown Sugar, Dark | 1 kg (14.2%)   | 100 %  | 99  |

## Hops

| Use for | Name                | Amount | Time   | Alpha acid |
|---------|---------------------|--------|--------|------------|
| Boil    | Styrian Golding     | 30 g   | 60 min | 3.6 %      |
| Boil    | Hallertau Tradition | 30 g   | 30 min | 5 %        |
| Boil    | Fuggles             | 15 g   | 10 min | 4.5 %      |

## Yeasts

| Name                     | Type | Form   | Amount  | Laboratory       |
|--------------------------|------|--------|---------|------------------|
| FM27 Artefakty trapistów | Ale  | Liquid | 1000 ml | Fermentum Mobile |

## Notes

- Cukier dodać 15 minut przed końcem gotowania.  
Wysładzać wodą o temp. 78 st C  
Po gotowaniu schłodzić do 17 stC i dodać drożdże.  
Fermentować w temp. min. 17 st (dolna temp.), potem ma się podnieść do 23-29stC. Po ok 10 dniach przełączyć na cichą. Cicha fermentacja - ok. 1-2stC przez 3 tygodnie.  
*Jan 11, 2023, 1:58 PM*