

# Belgian Dubbel

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **23**
- SRM **16.5**
- Style **Belgian Dubbel**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **12 %/h**
- Boil size **28.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.1 liter(s)**
- Total mash volume **28.4 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **75 C**, Time **5 min**

## Mash step by step

- Heat up **22.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **12.5 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

## Fermentables

| Type  | Name                          | Amount         | Yield  | EBC |
|-------|-------------------------------|----------------|--------|-----|
| Grain | CastleMalting - Pilsneński    | 4.5 kg (66.2%) | 81 %   | 3.5 |
| Grain | CastleMalting - Monachijski   | 1 kg (14.7%)   | 80 %   | 15  |
| Grain | CastleMalting - Abbey         | 0.2 kg (2.9%)  | 80 %   | 45  |
| Grain | CastleMalting - Special B     | 0.2 kg (2.9%)  | 65.2 % | 300 |
| Grain | Weyermann - Caramunich® typ I | 0.2 kg (2.9%)  | 73 %   | 80  |
| Grain | Weyermann - Carawheat         | 0.2 kg (2.9%)  | 77 %   | 97  |
| Sugar | Cukier kandyzowany płynny     | 0.5 kg (7.4%)  | 78.3 % | 220 |

## Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil                | Sybilla | 25 g   | 90 min | 6 %        |
| Boil                | Sybilla | 15 g   | 30 min | 6 %        |
| Aroma (end of boil) | Sybilla | 10 g   | 20 min | 3.5 %      |

## Yeasts

| Name                    | Type | Form  | Amount | Laboratory       |
|-------------------------|------|-------|--------|------------------|
| FM26 Belgijskie Pagórki | Ale  | Slant | 100 ml | Fermentum Mobile |
| Pierwszy fermentor      |      |       |        |                  |

## Extras

| Type                          | Name                      | Amount | Use for | Time   |
|-------------------------------|---------------------------|--------|---------|--------|
| Water Agent                   | Chlorek wapnia [ml]       | 6.8 g  | Mash    | 85 min |
| wartość wyliczona w ml dla 3g |                           |        |         |        |
| Flavor                        | Cukier kandyzowany płynny | 500 g  | Boil    | 10 min |

## Notes

- Fermentacja burzliwa:
  - FM zwiększać od 19 stopni w górę do 23Fermentacja cicha w jak najniższej, dodatniej temperaturze przez dwa tygodnie  
*Mar 4, 2020, 11:58 AM*
- - FM26 to drożdże podobne do WYEAST 3522 Belgian Ardennes dające aromaty: goździkowy, guma balonowa, cierpki, fenolowy. Fermentowane w temeperaturze 18-24 dając profil czysty, słodowy.  
*Mar 4, 2020, 12:36 PM*
- Profil wody do przewaga chlorków nad siarczkami 2:1.  
Dodając 50% destylowanej + 50% krankówka wychodzi profil zbliżony do Orval i Westvleteren  
*Sep 24, 2021, 10:05 AM*