

Belgijski Dwójniak

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **25**
- SRM **12.4**
- Style **Belgian Dubbel**

Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **10 %**
- Size with trub loss **19.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **50 C**, Time **10 min**
- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **19.3 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **45 min** at **65C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód jęczmienny monachijski typ I 12-18 EBC Weyermann	3.7 kg (61.7%)	79 %	15
Grain	Viking Pale Ale malt	1 kg (16.7%)	80 %	5
Grain	Caramunich® typ I	0.3 kg (5%)	73 %	80
Grain	Carabelge	0.5 kg (8.3%)	80 %	30
Sugar	Brown Sugar, Dark	0.5 kg (8.3%)	100 %	99

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	50 min	11.5 %
Boil	Oktawia	15 g	10 min	7.8 %
Whirlpool	Oktawia	15 g	10 min	7.8 %
Whirlpool	Magnum	15 g	10 min	11.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
M31	Ale	Dry	11 g	---