

Dubbel

- Gravity **15.7 BLG**
- ABV ---
- IBU **20**
- SRM **15.6**
- Style **Belgian Dubbel**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **19.1 liter(s)**

Mash information

- Mash efficiency **59 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **19 liter(s)**
- Total mash volume **23.7 liter(s)**

Steps

- Temp **55 C**, Time **1 min**
- Temp **65 C**, Time **60 min**
- Temp **70 C**, Time **15 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **19 liter(s)** of strike water to **59.4C**
- Add grains
- Keep mash **1 min** at **55C**
- Keep mash **60 min** at **65C**
- Keep mash **15 min** at **70C**
- Keep mash **5 min** at **77C**
- Sparge using **4.9 liter(s)** of **76C** water or to achieve **19.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński Soufflet	3.5 kg (68%)	--- %	4
Grain	Strzegom Monachijski typ I	1 kg (19.4%)	--- %	16
Grain	Special B Malt	0.1 kg (1.9%)	--- %	350
Grain	Biscuit Malt	0.1 kg (1.9%)	--- %	50
Grain	Black of Black Castle	0.05 kg (1%)	--- %	500
Sugar	cukier trzcinowy	0.4 kg (7.8%)	--- %	---

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Fuggles	25 g	60 min	4.5 %
Aroma (end of boil)	Fuggles	20 g	10 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM27 Artefakty trapistów	Ale	Slant	150 ml	FM