

Belg

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **22**
- SRM **15.7**
- Style **Belgian Dubbel**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **16.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

Steps

- Temp **64 C**, Time **25 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **10.5 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **25 min** at **64C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **16.6 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2 kg (60.6%)	80 %	4
Grain	Biscuit Malt	0.25 kg (7.6%)	79 %	45
Grain	Caraaroma	0.25 kg (7.6%)	78 %	400
Grain	Caramunich® typ I	0.25 kg (7.6%)	73 %	80
Grain	Strzegom Wiedeński	0.25 kg (7.6%)	79 %	10
Sugar	Candi Sugar, Clear	0.3 kg (9.1%)	78.3 %	2

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	20 g	60 min	5.1 %
Aroma (end of boil)	Tettnang	20 g	10 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M27 Belgian Ale	Ale	Dry	11 g	Mangrove Jack's