

## #24 Rye Belgian Dubbel

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **25**
- SRM **14.2**
- Style **Belgian Dubbel**

### Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **10.5 liter(s)**
- Total mash volume **13.5 liter(s)**

### Steps

- Temp **63 C**, Time **45 min**
- Temp **70 C**, Time **15 min**
- Temp **77 C**, Time **5 min**

### Mash step by step

- Heat up **10.5 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **45 min** at **63C**
- Keep mash **15 min** at **70C**
- Keep mash **5 min** at **77C**
- Sparge using **5.7 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Wiedeński	0.5 kg (15.9%)	79 %	10
Grain	Strzegom Monachijski typ I	0.5 kg (15.9%)	79 %	16
Grain	Karmelowy Czerwony	0.8 kg (25.4%)	75 %	59
Grain	Żytni	1 kg (31.7%)	85 %	8
Grain	Strzegom Karmel 150	0.2 kg (6.3%)	75 %	150
Sugar	Cukier	0.15 kg (4.8%)	100 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Styrian Cardinal	5 g	60 min	8.2 %
Boil	Styrian Cardinal	5 g	40 min	8.2 %
Boil	Styrian Cardinal	5 g	20 min	8.2 %
Boil	Styrian Cardinal	15 g	5 min	8.2 %

### Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Mangrove Jack's M47 Belgian Abbey	Ale	Slant	150 ml	Mangrove Jack's