

## #34 Belgian Christmas Ale

- Gravity **21.8 BLG**
- ABV ---
- IBU **24**
- SRM **48.8**
- Style **Belgian Specialty Ale**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25 liter(s)**
- Total mash volume **33.4 liter(s)**

### Steps

- Temp **72 C**, Time **80 min**
- Temp **79 C**, Time **2 min**

### Mash step by step

- Heat up **25 liter(s)** of strike water to **80.7C**
- Add grains
- Keep mash **80 min** at **72C**
- Keep mash **2 min** at **79C**
- Sparge using **8.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	4 kg (47.9%)	80 %	4
Grain	Strzegom Monachijski typ I	2 kg (24%)	79 %	16
Grain	Castlemalting crystal	1 kg (12%)	78 %	150
Grain	Simpsons - Coffee Malt	1 kg (12%)	74 %	296
Grain	black to black	0.35 kg (4.2%)	72 %	500

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Admiral	15 g	75 min	14.3 %
Boil	Brewers Gold	15 g	15 min	7.6 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M27 Belgian Ale	Ale	Slant	500 ml	Mangrove Jack's