

## W003-Christmas / Belgian dark strong ale

- Gravity **19.1 BLG**
- ABV **7.8 %**
- IBU **31.9**
- SRM **40**
- Style **Belgian Dark Strong Ale**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **0 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.48 liter(s)**

### Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.5 liter(s)**
- Total mash volume **30 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **75 C**, Time **10 min**

### Mash step by step

- Heat up **22.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **75C**
- Sparge using **11.5 liter(s)** of **76C** water or to achieve **26.48 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Munich Malt	3 kg	79 %	46
Grain	Vienna Malt	3 kg	79 %	17
Grain	(de) CHÂTEAU CRYSTAL®	0.5 kg	68 %	345
Grain	Carawheat (Weyermann)	0.5 kg	80.07 %	261
Grain	Słód Czekoladowy 400	0.5 kg	68 %	1066

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnat	14 g	60 min	11.2 %
Boil	Lublin (Lubelski)	20 g	30 min	3.5 %
Boil	Magnat	11 g	30 min	11.2 %
Boil	Lublin (Lubelski)	30 g	15 min	3.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
BELGIAN ALE	Ale	Dry	--- g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Spice	Bargamot peel	20 g	Boil	5 min
Spice	Cinnamon Stick	5 g	Boil	5 min
Spice	Cardamom	2.5 g	Boil	5 min
Spice	Goździki	2.5 g	Boil	5 min
Spice	Cinnamon Stick	5 g	Secondary	10 day(s)
Flavor	Oak Chips	5 g	Secondary	42 day(s)