

Świąteczne Ciemne z Browamatora

- Gravity **17.7 BLG**
- ABV **7.6 %**
- IBU **48**
- SRM **23.2**
- Style **Christmas/Winter Specialty Spiced Beer**

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 **2.7 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **27.4 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **20 liter(s)** of strike water to **69.8C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński Viking Malt	4.4 kg (59.5%)	80 %	4
Grain	Wędzony bukiem Viking Malt	0.6 kg (8.1%)	80 %	10
Grain	Wędzony Jabłonią Viking Malt	0.6 kg (8.1%)	80 %	10
Grain	Karmelowy Żytni Viking Malt	0.6 kg (8.1%)	70 %	200
Grain	Karmelowy 150 Viking Malt	0.6 kg (8.1%)	75 %	150
Grain	Castle Malting Cafe Light	0.6 kg (8.1%)	70 %	250

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Comet	40 g	50 min	8.3 %
Boil	Fantasia	20 g	20 min	4.3 %
Boil	Comet	20 g	20 min	8.3 %
Boil	Fantasia	40 g	10 min	4.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
T-58	Ale	Dry	23 g	SafBrew

Extras

Type	Name	Amount	Use for	Time
Spice	Cynamon Cięty	40 g	Boil	20 min