

Świąteczne Ciemne

- Gravity **19.6 BLG**
- ABV **8.6 %**
- IBU **97**
- SRM **19.3**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.2 liter(s)**
- Total mash volume **15.7 liter(s)**

Steps

- Temp **63 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

Mash step by step

- Heat up **12.2 liter(s)** of strike water to **69.2C**
- Add grains
- Keep mash **60 min** at **63C**
- Keep mash **10 min** at **72C**
- Sparge using **4.5 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	1.7 kg (48.6%)	82 %	4
Grain	Viking Wędzony bukiem	0.6 kg (17.1%)	82 %	10
Grain	Weyermann - Carared	0.3 kg (8.6%)	75 %	45
Grain	Strzegom Karmel 150	0.3 kg (8.6%)	75 %	150
Słód karmelowy 150 Viking Malt				
Grain	Castle Cafe	0.3 kg (8.6%)	75.5 %	250
Grain	Carabody Viking malt	0.3 kg (8.6%)	79 %	7
Carabody Viking malt				

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Herkules	20 g	60 min	17 %
Boil	Herkules	10 g	20 min	17 %
Boil	Mandarina Bavaria	10 g	20 min	10 %
Aroma (end of boil)	Mandarina Bavaria	20 g	11 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew T-58	Ale	Dry	11.5 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Spice	cynamon	20 g	Boil	20 min