

Świąteczne ale widawa

- Gravity **19.6 BLG**
- ABV **8.6 %**
- IBU **28**
- SRM **27.1**
- Style **Christmas/Winter Specialty Spiced Beer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.5 liter(s)**
- Total mash volume **27.3 liter(s)**

Steps

- Temp **53 C**, Time **10 min**
- Temp **66 C**, Time **50 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **20.5 liter(s)** of strike water to **58.5C**
- Add grains
- Keep mash **10 min** at **53C**
- Keep mash **50 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **12.7 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2.67 kg (32.6%)	82 %	4
Grain	Monachijski	1.33 kg (16.3%)	80 %	16
Grain	Strzegom Bursztynowy	1.33 kg (16.3%)	70 %	49
Grain	Barley, Flaked	0.53 kg (6.5%)	70 %	4
Grain	Viking melanoidynowy	0.4 kg (4.9%)	75 %	60
Grain	Strzegom Karmel 600	0.24 kg (2.9%)	68 %	601
Grain	Strzegom Czekoladowy jasny	0.2 kg (2.4%)	68 %	400
Grain	Strzegom Czekoladowy ciemny	0.13 kg (1.6%)	68 %	1200
Sugar	Milk Sugar (Lactose)	0.67 kg (8.2%)	76.1 %	0
Sugar	Brown Sugar, Light	0.67 kg (8.2%)	100 %	16

Hops

Use for	Name	Amount	Time	Alpha acid
---------	------	--------	------	------------

Boil	Marynka	26.67 g	60 min	8.7 %
Boil	Lublin (Lubelski)	26.67 g	60 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
t-58	Ale	Dry	30.67 g	---

Extras

Type	Name	Amount	Use for	Time
Spice	przyprawa do piernika	40 g	Boil	5 min
Flavor	skórka pomarańczowa	26.67 g	Boil	5 min
Flavor	chilli	0 g	Boil	5 min
Spice	kakao	3.33 g	Boil	5 min
Flavor	jałowiec	6.67 g	Boil	5 min