

Świąteczne

- Gravity **14.7 BLG**
- ABV ---
- IBU **27**
- SRM **47.6**
- Style **Spice, Herb, or Vegetable Beer**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **9.1 liter(s)**
- Total mash volume **12.8 liter(s)**

Steps

- Temp **52 C**, Time **20 min**
- Temp **69 C**, Time **45 min**
- Temp **76 C**, Time **15 min**

Mash step by step

- Heat up **9.1 liter(s)** of strike water to **58.4C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **45 min** at **69C**
- Keep mash **15 min** at **76C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	1.5 kg (39%)	79 %	6
Grain	Strzegom Monachijski typ II	1 kg (26%)	79 %	22
Grain	Thomas Fawcett Halcyon	0.5 kg (13%)	80.5 %	5
Grain	Fawcett - Pszeniczny Czekoladowy	0.5 kg (13%)	73 %	1001
Grain	Jęczmień palony	0.15 kg (3.9%)	55 %	985
Sugar	Milk Sugar (Lactose)	0.2 kg (5.2%)	76.1 %	0

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Target	15 g	60 min	10.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Safale

Extras

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	2 g	Boil	10 min
Other	pożywka dla drożdży	1.5 g	Boil	15 min
Spice	cynamon	8 g	Boil	20 min
Spice	cynamon	8 g	Secondary	5 day(s)
Flavor	skórki bergamotki	20 g	Secondary	7 day(s)
Spice	goździki	2 g	Boil	10 min
Spice	gałka muskatołowa	5 g	Boil	10 min
Flavor	wanilia w laskach	2 g	Secondary	5 day(s)