

wisnia

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **30**
- SRM **32.5**
- Style **Sweet Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

Steps

- Temp **67 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **45 min** at **67C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	3 kg (54.5%)	81 %	4
Grain	Monachijski	1 kg (18.2%)	80 %	16
Grain	Strzegom Karmel 300	0.5 kg (9.1%)	70 %	299
Grain	Strzegom Czekoladowy ciemny	0.2 kg (3.6%)	68 %	1200
Grain	Jęczmień palony	0.3 kg (5.5%)	55 %	985
Grain	Płatki jęczmienne	0.5 kg (9.1%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Eldorado	20 g	60 min	13.7 %
Aroma (end of boil)	Mandarina Bavaria	20 g	5 min	9.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10 g	---

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
Flavor	wisnia	1000 g	Secondary	7 day(s)
Flavor	laktoza	1000 g	Boil	5 min