

# święteczny stout 2020

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **36**
- SRM **44.2**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **75 min**
- Evaporation rate **5 %/h**
- Boil size **24.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **24.7 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **18.2 liter(s)** of strike water to **76.6C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **12.8 liter(s)** of **76C** water or to achieve **24.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5.5 kg (84.6%)	81 %	4
Grain	Fawcett - Pszonyczny Czekoladowy	1 kg (15.4%)	73 %	1001

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Horizon	10 g	60 min	14 %
Boil	Cascade	29.6 g	15 min	6.8 %
Boil	Horizon	19.5 g	15 min	14 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	suska sechlońska	750 g	Boil	20 min
Flavor	laktoza	1000 g	Boil	20 min

Flavor	suska sechlońska	250 g	Secondary	5 day(s)
Flavor	płatki dębowe w bourbonie	30 g	Secondary	14 day(s)

## Notes

- 16 blg bez laktozy  
*Oct 15, 2020, 8:03 PM*