

# Toffee Stout Grażyna sprężyna

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **15**
- SRM **50.8**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **65 min**
- Evaporation rate **10 %/h**
- Boil size **31.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.7 liter(s)**
- Total mash volume **31.6 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **77 C**, Time **5 min**

## Mash step by step

- Heat up **23.7 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **31.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3 kg (38%)	79 %	6
Grain	Viking Pilsner malt	1 kg (12.7%)	82 %	4
Grain	Strzegom Czekoladowy ciemny	0.5 kg (6.3%)	68 %	1200
Grain	Strzegom Karmel 300	1.5 kg (19%)	70 %	299
Grain	Płatki pszeniczne	0.7 kg (8.9%)	60 %	3
Grain	Płatki owsiane	0.7 kg (8.9%)	85 %	3
Grain	Jęczmień palony	0.5 kg (6.3%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	15 g	60 min	12 %
Dry Hop	Citra	30 g	10 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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FM13 Irlandzkie Ciemności	Ale	Liquid	30 ml	Fermentum Mobile
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### Extras

Type	Name	Amount	Use for	Time
Water Agent	Laktoza	1600 g	Boil	10 min
Other	płatki dębowe rum	20 g	Secondary	7 day(s)
Water Agent	Kawa Lavazza crema	80 g	Secondary	2 day(s)

### Notes

- vanilia albo laski albo ekstrakt do ustalenia  
*Sep 18, 2021, 6:35 PM*