

## #11 Stout z resztek

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **31**
- SRM **30.5**
- Style **Dry 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 **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.7 liter(s)**
- Total mash volume **26.2 liter(s)**

### Steps

- Temp **52 C**, Time **5 min**
- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **5 min**

### Mash step by step

- Heat up **19.7 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **5 min** at **52C**
- Keep mash **30 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **14.7 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pszeniczny	1.75 kg (26.7%)	85 %	4
Grain	BESTMALZ - Bestt Pale Ale	2.9 kg (44.3%)	80.5 %	6
Grain	Strzegom Monachijski typ II	1 kg (15.3%)	79 %	22
Grain	Strzegom Czekoladowy ciemny	0.5 kg (7.6%)	68 %	1200
Grain	Płatki owsiane	0.4 kg (6.1%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	35 g	60 min	10 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	15 g	Fermentis