

# Stout z kawą

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **21**
- SRM **38.6**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4.458 liter(s) / kg**
- Mash size **25 liter(s)**
- Total mash volume **30.6 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **2 min**

## Mash step by step

- Heat up **25 liter(s)** of strike water to **72.3C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **2 min** at **78C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (71.4%)	80 %	5
Grain	Oats, Malted	0.3 kg (5.4%)	80 %	2
Grain	Caraaroma	0.3 kg (5.4%)	78 %	400
Grain	Caramunich® typ I	0.2 kg (3.6%)	73 %	80
Grain	Słód Caramunich Typ II Weyermann	0.2 kg (3.6%)	73 %	120
Grain	Jęczmień palony	0.3 kg (5.4%)	50 %	985
Grain	Strzegom Czekoladowy ciemny	0.3 kg (5.4%)	50 %	1200

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %

## Yeasts

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

## Extras

Type	Name	Amount	Use for	Time
Flavor	laktoza	250 g	Boil	0 min