

# Macciato Stout

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **10**
- SRM **33.2**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **5 %**
- Size with trub loss **63 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **77 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **43.7 liter(s)**
- Total mash volume **58.2 liter(s)**

## Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **43.7 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **47.9 liter(s)** of **76C** water or to achieve **77 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	12 kg (82.5%)	75 %	7
Grain	Strzegom Karmel 150	0.9 kg (6.2%)	75 %	150
Grain	Jęczmień palony	0.9 kg (6.2%)	55 %	985
Grain	Strzegom Czekoladowy 1200	0.75 kg (5.2%)	68 %	1202

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	45 g	10 min	15.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	2 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	Laktoza	1.5 g	Boil	10 min

Spice	Kawa	100 g	Boil	10 min
Spice	Czekolada	100 g	Boil	10 min