

# Karmelowy Stout

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- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **22**
- SRM **25.2**

## 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 **5 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **21.6 liter(s)**

## Steps

- Temp **50 C**, Time **10 min**
- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **53C**
- Add grains
- Keep mash **10 min** at **50C**
- Keep mash **60 min** at **67C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3 kg (75%)	82 %	4
Grain	Karmelowy Czerwony	0.6 kg (15%)	75 %	59
Adjunct	prażone ziarno jęczmienia	0.4 kg (10%)	--- %	1001

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	HBC 472	20 g	60 min	9.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - London Ale	Ale	Liquid	200 ml	Wyeast Labs