

# Mała Czarna

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **25**
- SRM **38.1**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **2 %**
- Size with trub loss **26 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **31.8 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **28.1 liter(s)**

## Steps

- Temp **67 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **21.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **16.2 liter(s)** of **76C** water or to achieve **31.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (64%)	80 %	5
Grain	Viking Malt - Pszeniczny	0.5 kg (8%)	83 %	5
Grain	Płatki owsiane	0.4 kg (6.4%)	85 %	3
Grain	Strzegom Czekoladowy ciemny	0.4 kg (6.4%)	68 %	1200
Grain	Viking Malt - Dark Chocolate Malt	0.35 kg (5.6%)	60 %	827
Grain	Viking Malt - Żytni	0.2 kg (3.2%)	85 %	7
Grain	Jęczmień palony	0.2 kg (3.2%)	55 %	985
Grain	Słód Caramunich Typ II Weyermann	0.2 kg (3.2%)	73 %	120

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Northdown	25 g	60 min	8.2 %
Boil	Fuggles	25 g	30 min	4.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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S04	Ale	Dry	11.5 g	---
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### Extras

Type	Name	Amount	Use for	Time
Flavor	Ksylitol	300 g	Boil	30 min
Flavor	Laktoza	500 g	Boil	30 min