

# Mroczna Karolina

- Gravity **25.1 BLG**
- ABV **11.7 %**
- IBU **89**
- SRM **48**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **40.2 liter(s)**
- Total mash volume **53.6 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**

## Mash step by step

- Heat up **40.2 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Sparge using **4.9 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	8.6 kg (64.2%)	80 %	7
Grain	Strzegom Monachijski typ I	1.6 kg (11.9%)	79 %	16
Grain	Strzegom Bursztynowy	1.6 kg (11.9%)	70 %	49
Grain	Chocolate Malt (UK)	0.8 kg (6%)	73 %	887
Grain	Strzegom Czekoladowy jasny	0.4 kg (3%)	68 %	400
Grain	Strzegom pszenica prażona	0.4 kg (3%)	70 %	1000

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bramling	100 g	20 min	6 %
Boil	Columbus/Tomahawk/Zeus	100 g	20 min	15.5 %
Boil	granulat	100 g	20 min	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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FM13 Irlandzkie Ciemności	Ale	Liquid	100 ml	Fermentum Mobile
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### Extras

Type	Name	Amount	Use for	Time
Flavor	płatki debowe mocno przepalone	100 g	Secondary	30 day(s)