

# Czarna Krowa

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- Gravity **12.3 BLG**
- ABV ---
- IBU **24**
- SRM **40**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **25.9 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **18.6 liter(s)**

## Steps

- Temp **67 C**, Time **80 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **14 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **80 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.7 kg (79.6%)	79 %	6
Grain	Strzegom Karmel 600	0.4 kg (8.6%)	68 %	601
Grain	Briess - Chocolate Malt	0.35 kg (7.5%)	60 %	690
Grain	Jęczmień palony	0.2 kg (4.3%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	northdown	25 g	60 min	8.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
mauribrew ale	Ale	Dry	12 g	mauribrew

## Extras

Type	Name	Amount	Use for	Time
Flavor	lakotoza	500 g	Boil	15 min