

# Milk Stout Kawowy

- Gravity **16.4 BLG**
- ABV **6.9 %**
- IBU **23**
- SRM **20.7**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **84 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **25.2 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

## Mash step by step

- Heat up **19.6 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **72C**
- Sparge using **17.7 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3.5 kg (49.3%)	80 %	5
Grain	Viking Pilsner malt	1.5 kg (21.1%)	82 %	4
Grain	Caramunich® typ I	0.2 kg (2.8%)	73 %	80
Grain	Carafa II	0.1 kg (1.4%)	70 %	812
Grain	Jęczmień palony	0.3 kg (4.2%)	55 %	985
Sugar	Milk Sugar (Lactose)	1.5 kg (21.1%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	150 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Flavor	Kawa	200 g	Secondary	1 day(s)
Flavor	Laktoza	1500 g	Boil	10 min