

# Cranberry chocolate milk stout

- Gravity **16.6 BLG**
- ABV **7 %**
- IBU **21**
- SRM **28.9**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.7 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **28.4 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **21.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **17.5 liter(s)** of **76C** water or to achieve **31.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale ale IREKS	5 kg (64.9%)	80 %	6
Grain	Monachijski IREKS	1.4 kg (18.2%)	78 %	20
Grain	Melanoidynowy IREKS	0.2 kg (2.6%)	78 %	45
Grain	Fawcett chocolate	0.35 kg (4.5%)	71 %	1200
Adjunct	Laktoza	0.6 kg (7.8%)	--- %	---
Grain	Carafa special typ III	0.15 kg (1.9%)	70 %	1300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	22 g	60 min	12.5 %
Dry Hop	Laktoza	600 g	5 day(s)	1 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11 g	Fermentis

## Extras

Type	Name	Amount	Use for	Time
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Flavor	Żurawina liofilizowana	100 g	Secondary	14 day(s)
Flavor	Ziarna kakowca	200 g	Secondary	14 day(s)
Prażone i rozdrobnione				

## Notes

- temp fermentacji 18 stopni

Na zimno 2 wersje:

1. Ziarno kakowca 100g

2. Ziarno kakowca 100g + żurawina liofilizowana 100g

*Aug 26, 2019, 9:36 PM*