

# MILK RIS

- Gravity **24.9 BLG**
- ABV **11.6 %**
- IBU **78**
- SRM **53.3**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **25.2 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **19.3 liter(s)**
- Total mash volume **26.9 liter(s)**

## Steps

- Temp **65 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **19.3 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **13.6 liter(s)** of **76C** water or to achieve **25.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.5 kg (63.2%)	80 %	5
Grain	Fawcett - Pale Chocolate	1 kg (11.5%)	71 %	600
Grain	Słód czekoladowy ciemny Viking Malt	0.25 kg (2.9%)	71 %	1100
Grain	Słód żytni czekoladowy Weyermann	0.25 kg (2.9%)	71 %	500
Grain	Słód karmelowy pszeniczny Viking Malt	0.5 kg (5.7%)	71 %	100
Grain	Jęczmień palony	0.2 kg (2.3%)	55 %	985
Sugar	Milk Sugar (Lactose)	1 kg (11.5%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	82 g	60 min	13.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Safale S-04	Ale	Dry	22 g	Safale
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### Extras

Type	Name	Amount	Use for	Time
Spice	kawa	30 g	Secondary	7 day(s)