

# Marcowy Ris

- Gravity **34.5 BLG**
- ABV **18 %**
- IBU **34**
- SRM **87.7**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **120 min**
- Evaporation rate **10 %/h**
- Boil size **41.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **41 liter(s)**
- Total mash volume **61.5 liter(s)**

## Steps

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

## Mash step by step

- Heat up **41 liter(s)** of strike water to **80C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **20.9 liter(s)** of **76C** water or to achieve **41.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	11 kg (51.2%)	80 %	4
Grain	Weyermann Specjal W	2 kg (9.3%)	68 %	300
Grain	Weyermann - Carapils	0.5 kg (2.3%)	78 %	4
Grain	Czekoladowy	1 kg (4.7%)	60 %	788
Grain	Caraaroma	1 kg (4.7%)	78 %	400
Grain	Weyermann - Carafa II	1 kg (4.7%)	70 %	837
Grain	Jęczmień palony	1 kg (4.7%)	55 %	985
Grain	Płatki owsiane	2 kg (9.3%)	85 %	3
Sugar	cukier trzcinowy	1 kg (4.7%)	100 %	---
Grain	Weyermann - Chocolate Rye	1 kg (4.7%)	20 %	493

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	90 g	50 min	10 %
Boil	HBC 472 Experimental	90 g	10 min	9.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	500 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Other	cukier trzcinowy	1000 g	Boil	60 min