

# RIS

- Gravity **28.7 BLG**
- ABV **14 %**
- IBU **115**
- SRM **69.6**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **120 min**
- Evaporation rate **7 %/h**
- Boil size **27.5 liter(s)**

## Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **2.8 liter(s) / kg**
- Mash size **42.3 liter(s)**
- Total mash volume **57.4 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **42.3 liter(s)** of strike water to **75.4C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **0.3 liter(s)** of **76C** water or to achieve **27.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	5 kg (32.1%)	80 %	8
Grain	Pilzneński	2 kg (12.8%)	81 %	4
Grain	Strzegom Monachijski typ II	2 kg (12.8%)	79 %	22
Grain	Płatki owsiane	1.6 kg (10.3%)	85 %	3
Grain	Biscuit Malt	1 kg (6.4%)	79 %	45
Grain	Chocolate Malt (UK)	1 kg (6.4%)	73 %	887
Grain	Simpsons - Crystal Medium	1 kg (6.4%)	74 %	108
Grain	Weyermann Caramunich 3	0.5 kg (3.2%)	76 %	150
Grain	Briess - Black Malt	0.5 kg (3.2%)	55 %	985
Sugar	Candi Sugar, Dark	0.5 kg (3.2%)	78.3 %	542
Grain	Weyermann - Melanoiden Malt	0.25 kg (1.6%)	81 %	53
Grain	Special B Malt	0.25 kg (1.6%)	65.2 %	315

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	200 g	60 min	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP004 - Irish Ale Yeast	Ale	Slant	400 ml	White Labs

## Extras

Type	Name	Amount	Use for	Time
Water Agent	CaCl <sub>2</sub>	10 g	Mash	60 min
Water Agent	Lactic acid	20 g	Mash	60 min
Finings	Whirlfloc	2.5 g	Boil	10 min