

## RIS #3 - kawowy

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- Gravity **25.9 BLG**
- ABV **12.2 %**
- IBU **34**
- SRM **33.3**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **28.2 liter(s)**
- Total mash volume **37.6 liter(s)**

### Steps

- Temp **62 C**, Time **50 min**
- Temp **73 C**, Time **10 min**
- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **10 min**

### Mash step by step

- Heat up **28.2 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **50 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **10 min** at **73C**
- Sparge using **11.6 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.5 kg (43.3%)	80 %	5
Grain	Pilzneński	1.5 kg (14.4%)	81 %	4
Grain	Monachijski	1.8 kg (17.3%)	80 %	16
Grain	Abbey Castle	0.4 kg (3.8%)	80 %	45
Grain	Weyermann - Caramunich Typ II	0.3 kg (2.9%)	73 %	120
Grain	Weyermann Belgian Special B Malt	0.4 kg (3.8%)	68 %	400
Grain	Weyermann - Carafa I	0.2 kg (1.9%)	65 %	900
Grain	Weyermann - pszeniczny czekoladowy	0.3 kg (2.9%)	70 %	1050
Sugar	Laktoza	1 kg (9.6%)	100 %	0

### Hops

Use for	Name	Amount	Time	Alpha acid
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Boil	gorzki Marynka - szyszki własny zbiór	50 g	90 min	10 %
Aroma (end of boil)	aromatyczny Lubelski - szyszki własny zbiór	50 g	10 min	4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
S-04	Ale	Slant	600 ml	Safale

### Extras

Type	Name	Amount	Use for	Time
Flavor	Kawa Belleaom Espresso 100 % Arabica - śruta	150 g	Boil	5 min
Flavor	Kawa Ethiopia Gedeb Chelchele - śruta	125 g	Secondary	14 day(s)
Water Agent	Kwas cytrynowy	7.5 g	Mash	---