

## RIS v4 #30

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- Gravity **30 BLG**
- ABV ---
- IBU **110**
- SRM **103.5**
- 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 **150 min**
- Evaporation rate **10 %/h**
- Boil size **28.9 liter(s)**

### Mash information

- Mash efficiency **65.1 %**
- Liquor-to-grist ratio **2.65 liter(s) / kg**
- Mash size **21.7 liter(s)**
- Total mash volume **29.9 liter(s)**

### Steps

- Temp **64 C**, Time **60 min**
- Temp **68 C**, Time **15 min**
- Temp **72 C**, Time **15 min**
- Temp **77 C**, Time **5 min**

### Mash step by step

- Heat up **21.7 liter(s)** of strike water to **72.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **28.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Bruntal - pilzneński	4 kg (34.5%)	81 %	4
Grain	Bruntal - pszeniczny	0.8 kg (6.9%)	83 %	5
Grain	Viking - Rye Malt	0.6 kg (5.2%)	81 %	8
Grain	Bestmalz - Munich Malt I	0.6 kg (5.2%)	81 %	14
Liquid Extract	ekstrakt słodowy ciemny WES	1.7 kg (14.7%)	80 %	620
Liquid Extract	ekstrakt słodowy jasny WES	1.7 kg (14.7%)	80 %	45
Grain	Chateau - Special B Malt	0.5 kg (4.3%)	77 %	350
Grain	Chateau - Biscuit Malt	0.3 kg (2.6%)	79 %	45
Grain	Chateau - Crystal	0.1 kg (0.9%)	78 %	150
Grain	Weyermann - Chocolate Wheat	0.4 kg (3.4%)	74 %	900
Grain	Viking - Roasted Rye	0.2 kg (1.7%)	70 %	1000

Grain	Weyermann - Carafa Special II	0.15 kg (1.3%)	65 %	1150
Grain	Bruntal - pale ale	0.55 kg (4.7%)	79 %	6.5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	50 g	60 min	10.5 %
Boil	lunga	50 g	60 min	11 %
Boil	Chinook	22 g	60 min	11.2 %
Boil	lunga	50 g	30 min	11 %
Boil	Hallertau Mittelfruh	35 g	30 min	4.7 %
Boil	Hallertau Tradition	15 g	30 min	5.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Slant	450 ml	---

## Extras

Type	Name	Amount	Use for	Time
Flavor	płatki dębowe bourbon+zwykłe	50 g	Secondary	30 day(s)
Flavor	płatki dębowe sherry	50 g	Secondary	30 day(s)
Other	fosforan diamonu	4 g	Boil	30 min