

## #18 RIS weselny

- Gravity **27 BLG**
- ABV ---
- IBU **111**
- SRM **40**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

### Steps

- Temp **46 C**, Time **30 min**
- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **45 min**

### Mash step by step

- Heat up **18 liter(s)** of strike water to **50.5C**
- Add grains
- Keep mash **30 min** at **46C**
- Keep mash **60 min** at **66C**
- Keep mash **45 min** at **72C**
- Sparge using **7.2 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Bestmalz - Chocolate 800-1000 EBC	1 kg (12.2%)	70 %	800
Grain	Special B Malt	0.5 kg (6.1%)	65.2 %	315
Grain	Castle Abby	3.5 kg (42.7%)	78 %	45
Grain	Żytni	1 kg (12.2%)	85 %	8
Dry Extract	Bursztynowy WES 1,2 kg	1.2 kg (14.6%)	99 %	300
Grain	Żyto prażone Strzegom	0.2 kg (2.4%)	68 %	1000
Adjunct	Płatki owsiane	0.6 kg (7.3%)	50 %	2

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	35 g	60 min	13 %
Boil	Ella (AUS)	20 g	60 min	14.6 %
Boil	Ella (AUS)	30 g	30 min	14.6 %
Boil	Fuggles	50 g	30 min	4.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	10 g	Danstar