

## RiS 2019 biab

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- Gravity **27.4 BLG**
- ABV **13.2 %**
- IBU **36**
- SRM **33.4**
- Style **Russian Imperial Stout**

### Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **16.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19.8 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30.1 liter(s)**
- Total mash volume **40.1 liter(s)**

### Steps

- Temp **65 C**, Time **120 min**

### Mash step by step

- Heat up **30.1 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **120 min** at **65C**
- Sparge using **-0.3 liter(s)** of **76C** water or to achieve **19.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Caramel/Crystal Malt	1.45 kg (14.5%)	70 %	60
Grain	carmel armoma	0.75 kg (7.5%)	70 %	30
Grain	BESTMALZ - Best Wheat Malt	0.5 kg (5%)	82 %	4
Grain	Minch - Irish Craft Pale Ale Malt	7 kg (69.8%)	80 %	5
Grain	Chocolate - crushed grains	0.25 kg (2.5%)	50 %	1125
Grain	Weyermann - Carafa II	0.08 kg (0.8%)	70 %	1150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Huell Melon	37.27 g	50 min	7.5 %
Boil	Tradition	5.54 g	50 min	5.8 %
Boil	Equinox	7.18 g	50 min	13.4 %
Boil	Columbus/Tomahawk/Zeus	9.63 g	12 min	18.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM13 Irlandzkie Ciemności	Ale	Slant	500 ml	Fermentum Mobile

## Extras

Type	Name	Amount	Use for	Time
Spice	tonka	12.5 g	Secondary	7 day(s)