ris

- Gravity **28.5 BLG**
- ABV **13.8 %**
- IBU **60**
- SRM **43.5**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27.8 liter(s)**
- Total mash volume **37 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **27.8 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **20 min** at **72C**
- Sparge using **9.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	4.5 kg *(37%)*	80 %	7
Grain	Vienna Malt	3 kg *(24.7%)*	78 %	8
Grain	Caramel/Crystal Malt - 40L	0.5 kg *(4.1%)*	74 %	79
Grain	Special B Malt	0.5 kg *(4.1%)*	65.2 %	315
Grain	Carafa	0.3 kg *(2.5%)*	70 %	664
Grain	Fawcett - Pszeniczny Czekoladowy	0.3 kg *(2.5%)*	73 %	1001
Adjunct	Płatki owsiane	1 kg *(8.2%)*	85 %	3
Grain	Black Barley (Roast Barley)	0.15 kg *(1.2%)*	55 %	985
Sugar	Candi Sugar, Amber	0.9 kg *(7.4%)*	78.3 %	148
Adjunct	Barley, Flaked	1 kg *(8.2%)*	70 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galena	75 g	60 min	12 %
Boil	Crystal	70 g	20 min	4.5 %

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Yeasts

Name	Type	Form	Amount	Laboratory
US05	Ale	Slant	400 ml	---

Extras

Type	Name	Amount	Use for	Time
Fining	MECH	5 g	Boil	15 min
Water Agent	WĘGLAN WAPNIA	5 g	Mash	60 min

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