Ris 2

- Gravity **29.6 BLG**
- ABV **14.5 %**
- IBU **82**
- SRM **36.6**
- Style **Russian Imperial Stout**

Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2 liter(s) / kg**
- Mash size **32.4 liter(s)**
- Total mash volume **48.6 liter(s)**

Steps

- Temp **66 C**, Time **90 min**
- Temp **72 C**, Time **20 min**
- Temp **85 C**, Time **1 min**

Mash step by step

- Heat up **32.4 liter(s)** of strike water to **77.5C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **1 min** at **85C**
- Sparge using **16.7 liter(s)** of **76C** water or to achieve **32.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	8 kg *(49.4%)*	80 %	5
Grain	Pszeniczny	5 kg *(30.9%)*	85 %	4
Grain	Karmelowy Czerwony	1 kg *(6.2%)*	75 %	70
Grain	Strzegom Czekoladowy jasny	1 kg *(6.2%)*	68 %	400
Grain	Caramunich® typ I	0.5 kg *(3.1%)*	73 %	80
Grain	Caraaroma	0.5 kg *(3.1%)*	78 %	400
Grain	Fawcett - Pszeniczny Czekoladowy	0.1 kg *(0.6%)*	73 %	1001
Grain	Strzegom Czekoladowy ciemny	0.1 kg *(0.6%)*	68 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Perle	50 g	90 min	7 %
Boil	Iunga	100 g	60 min	11 %
Boil	Mosaic	50 g	30 min	10 %

Recipe has been printed via **BREWNESS.com** - a complex online solution for homebrewers to track brewing process easily.

Boil	Lublin (Lubelski)	50 g	10 min	4 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	500 ml	---