

# RIS

- Gravity **28.3 BLG**
- ABV **13.7 %**
- IBU **41**
- SRM **38.6**
- Style **Russian Imperial Stout**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.5 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **33.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **35.8 liter(s)**
- Total mash volume **50 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **35.8 liter(s)** of strike water to **58.4C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **40 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **33.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	7.5 kg (52.4%)	79 %	16
Grain	Strzegom Pilzneński	5 kg (35%)	80 %	4
Grain	Karmelowy Jasny 30EBC	0.8 kg (5.6%)	75 %	30
Grain	Strzegom Karmel 600	0.6 kg (4.2%)	68 %	601
Grain	Strzegom Barwiący	0.4 kg (2.8%)	68 %	1300

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	85 g	50 min	10 %
Boil	Lublin (Lubelski)	40 g	15 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Liquid	500 ml	Fermentum Mobile