

Belt

- Gravity **23.6 BLG**
- ABV **10.8 %**
- IBU **30**
- SRM **40.8**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **29.7 liter(s)**
- Total mash volume **39.6 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **70 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **29.7 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **40 min** at **70C**
- Keep mash **5 min** at **78C**
- Sparge using **6.6 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	wiedeński bruntal	3 kg (30.3%)	80 %	12
Grain	Strzegom Monachijski typ I	2 kg (20.2%)	79 %	16
Grain	Strzegom Monachijski typ II	1 kg (10.1%)	79 %	22
Grain	Strzegom Pilzneński	2 kg (20.2%)	80 %	4
Grain	Strzegom Karmel 100	0.5 kg (5.1%)	75 %	100
Grain	Strzegom Karmel 300	0.5 kg (5.1%)	70 %	299
Grain	Strzegom Czekoladowy ciemny	0.5 kg (5.1%)	68 %	1200
Grain	Płatki jęczmienne	0.4 kg (4%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Lublin (Lubelski)	30 g	60 min	4 %

Yeasts

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

Name	Type	Form	Amount	Laboratory
Saflager W 34/70	Lager	Slant	200 ml	Fermentis