

- Gravity **21.1 BLG**
- ABV ---
- IBU **22**
- SRM **50.5**
- Style **Baltic Porter**

Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.5 liter(s)**
- Total mash volume **27.7 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **21.5 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **3.7 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ II	2.7 kg (43.9%)	79 %	22
Grain	Strzegom Pilzneński	2.5 kg (40.7%)	80 %	4
Grain	Strzegom Karmel 600	0.35 kg (5.7%)	68 %	601
Grain	Jęczmień palony	0.1 kg (1.6%)	55 %	985
Grain	Strzegom Karmel 300	0.5 kg (8.1%)	70 %	299

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tradition	20 g	50 min	5.5 %
Boil	Tradition	20 g	10 min	5.5 %
Boil	Marynka	10 g	13 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
w 35	Lager	Dry	11 g	---

Extras

Type	Name	Amount	Use for	Time
Flavor	sliwka suska	250 g	Boil	15 min