

Magellan

- Gravity **22.7 BLG**
- ABV **10.3 %**
- IBU **36**
- SRM **32.1**
- 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 **80 %**
- Liquor-to-grist ratio **2.3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **28.4 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **58.9C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **50 min** at **62C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **15.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg (58.1%)	85 %	7
Grain	Strzegom Monachijski typ II	2 kg (23.3%)	79 %	22
Grain	Karmelowy Jasny 30EBC	0.5 kg (5.8%)	75 %	30
Grain	Strzegom Karmel 300	0.5 kg (5.8%)	70 %	299
Grain	Caraaroma	0.4 kg (4.7%)	78 %	400
Grain	Strzegom pszenica prażona	0.1 kg (1.2%)	70 %	1000
Grain	Strzegom Barwiący	0.1 kg (1.2%)	68 %	1300

Hops

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

Yeasts

Name	Type	Form	Amount	Laboratory
FM31 Bawarska Dolina	Lager	Liquid	200 ml	Fermentum Mobile