

Marcowe Trzy Baryłki

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **26**
- SRM **8.3**
- Style **Oktoberfest/Märzen**

Batch size

- Expected quantity of finished beer **31 liter(s)**
- Trub loss **5 %**
- Size with trub loss **32.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **39.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4.2 liter(s) / kg**
- Mash size **34.9 liter(s)**
- Total mash volume **43.2 liter(s)**

Steps

- Temp **64 C**, Time **30 min**
- Temp **73 C**, Time **60 min**
- Temp **78 C**, Time **2 min**

Mash step by step

- Heat up **34.9 liter(s)** of strike water to **69.2C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **60 min** at **73C**
- Keep mash **2 min** at **78C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **39.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Monachijski typ I	2.3 kg (27.7%)	79 %	16
Grain	Strzegom Wiedeński	2.55 kg (30.7%)	79 %	10
Grain	Pilzneński	2.5 kg (30.1%)	81 %	4
Grain	Carahell	0.25 kg (3%)	77 %	26
Grain	Słód Caramunich Typ II Weyermann	0.176 kg (2.1%)	73 %	120
Grain	Strzegom Monachijski typ II	0.4 kg (4.8%)	79 %	22
Grain	Strzegom Karmel 150	0.125 kg (1.5%)	75 %	150

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	1 g	75 min	8.4 %
Boil	Marynka	30 g	60 min	8.4 %
Boil	Tettnang	50 g	20 min	3.7 %