

CHMIELOWO MI

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **80**
- SRM **16.4**
- Style **Brown IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 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 **17.7 liter(s)**
- Total mash volume **23.6 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **70 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **17.7 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **60 min** at **70C**
- Keep mash **10 min** at **76C**
- Sparge using **14.6 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2 kg (33.9%)	82 %	4
Grain	Pilzniejszy	2 kg (33.9%)	81 %	4
Grain	Strzegom Bursztynowy	1 kg (16.9%)	70 %	49
Grain	Caraaroma	0.4 kg (6.8%)	78 %	400
Grain	Carared	0.5 kg (8.5%)	75 %	39

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Iunga	30 g	30 min	11 %
Boil	Simcoe	30 g	20 min	13.2 %
Whirlpool	Citra	30 g	10 min	12 %