

## #20 Mam być miłe czy szczerze

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **30**
- SRM **6.7**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**

### Mash step by step

- Heat up **13.5 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **18.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	3 kg (66.7%)	80 %	5
Grain	Weyermann - Carared	0.5 kg (11.1%)	75 %	45
Grain	Weyermann - Melanoiden Malt	0.5 kg (11.1%)	81 %	53
Grain	Weyermann - Carapils	0.5 kg (11.1%)	78 %	4

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	8 g	60 min	15.5 %
Boil	Mosaic	10 g	20 min	10 %
Boil	Columbus/Tomahawk/Zeus	22 g	5 min	15.5 %
Boil	Mosaic	15 g	5 min	10 %
Dry Hop	Mosaic	50 g	3 day(s)	10 %
Dry Hop	Citra	50 g	3 day(s)	12 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Lutra OYL-071	Ale	Slant	200 ml	Omega