

# Magiczna Flet

- Gravity **14.5 BLG**
- ABV ---
- IBU **66**
- SRM **6.8**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.94 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.6 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **18.3 liter(s)** of strike water to **73.8C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **16.9 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (80.2%)	79 %	6
Grain	Karmelowy Jasny 30EBC	1 kg (16%)	75 %	30
Grain	Jęczmień niesłodowany	0.235 kg (3.8%)	75 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	22 g	60 min	15.5 %
Boil	Simcoe	17 g	60 min	13.2 %
Aroma (end of boil)	Columbus/Tomahawk/Zeus	18 g	5 min	15.5 %
Aroma (end of boil)	Simcoe	23 g	5 min	13.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis