

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 |