

FREESTYLE POLAK 1.0

- Gravity **12.1 BLG**
- ABV ---
- IBU **42**
- SRM **4.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **32.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **17.3 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **76C**
- Sparge using **21.4 liter(s)** of **76C** water or to achieve **32.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 5 kg (87%) | 80 % | 4 |
| Grain | Zakwaszający | 0.25 kg (4.3%) | 80 % | 5 |
| Grain | Prażona pszenica Anglia | 0.5 kg (8.7%) | 80 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil | Marynka | 29 g | 60 min | 10.5 % |
| Boil | Puławski | 40 g | 20 min | 4.3 % |
| Boil | Puławski | 30 g | 7 min | 4.3 % |
| Aroma (end of boil) | Puławski | 30 g | 0 min | 4.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|------|--------|---------|--------|
| Water Agent | gips | 5 g | Mash | 60 min |

| | | | | |
|--------|------|-----|------|--------|
| Fining | mech | 5 g | Boil | 15 min |
|--------|------|-----|------|--------|