

Bitter Pete'a

- Gravity **10.7 BLG**
- ABV **4.3 %**
- IBU **39**
- SRM **6.1**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **27.6 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **14.4 liter(s)**

Steps

- Temp **67 C**, Time **75 min**

Mash step by step

- Heat up **10.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **75 min** at **67C**
- Sparge using **20.4 liter(s)** of **76C** water or to achieve **27.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale | 2.4 kg (66.7%) | 80 % | 6 |
| Grain | Strzegom Wiedeński | 0.8 kg (22.2%) | 79 % | 9 |
| Grain | Strzegom Karmel 100 | 0.2 kg (5.6%) | 75 % | 100 |
| Grain | Strzegom Cookie | 0.2 kg (5.6%) | 72 % | 50 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Challenger | 40 g | 60 min | 7 % |
| Aroma (end of boil) | Fuggles | 24 g | 5 min | 4.5 % |
| Whirlpool | Fuggles | 24 g | 15 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 8.8 g | Safale |

Extras

| Type | Name | Amount | Use for | Time |
|--------|-----------|--------|---------|--------|
| Fining | Whirlfloc | 1 g | Boil | 10 min |