

American IPA Pierwszy raz zacieram

- Gravity **16.6 BLG**
- ABV ---
- IBU **63**
- SRM **9.3**
- Style **American IPA**

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 **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **52 C**, Time **10 min**
- Temp **69 C**, Time **70 min**
- Temp **75.6 C**, Time **5 min**

Mash step by step

- Heat up **17.1 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **70 min** at **69C**
- Keep mash **5 min** at **75.6C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|--------|-----|
| Grain | Pilzneński | 4.1 kg (71.9%) | 81 % | 4 |
| Grain | Strzegom Wiedeński | 0.8 kg (14%) | 79 % | 10 |
| Grain | Strzegom Monachijski typ II | 0.6 kg (10.5%) | 79 % | 22 |
| Grain | Caramunich Malt | 0.2 kg (3.5%) | 71.7 % | 110 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|-----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 20 g | 45 min | 15.5 % |
| Boil | Green Bullet | 25 g | 45 min | 11 % |
| Boil | Green Bullet | 25 g | 5 min | 10.5 % |
| Boil | Centennial | 30 g | 1 min | 10.5 % |
| Dry Hop | Mosaic | 50 g | 10 day(s) | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 20 g | Safale |