

AIPA

- Gravity **16 BLG**
- ABV ---
- IBU **102**
- SRM **7.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.6 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **26.8 liter(s)**

Steps

- Temp **44 C**, Time **0 min**
- Temp **52 C**, Time **10 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **45 min**
- Temp **78 C**, Time **0 min**

Mash step by step

- Heat up **20.7 liter(s)** of strike water to **47.5C**
- Add grains
- Keep mash **0 min** at **44C**
- Keep mash **10 min** at **52C**
- Keep mash **20 min** at **62C**
- Keep mash **45 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **12 liter(s)** of **76C** water or to achieve **26.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale | 5 kg (82%) | 79 % | 6 |
| Grain | Pszeniczny | 0.5 kg (8.2%) | 85 % | 4 |
| Grain | Strzegom Karmel 30 | 0.5 kg (8.2%) | 75 % | 30 |
| Grain | strzegom karmel czerwony | 0.1 kg (1.6%) | --- % | 50 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|--------|------------|
| Boil | Marynka | 40 g | 60 min | 10.5 % |
| Boil | Citra | 20 g | 30 min | 13.5 % |
| Boil | Simcoe | 20 g | 30 min | 11.6 % |
| Boil | Citra | 20 g | 15 min | 13.5 % |
| Boil | Simcoe | 20 g | 15 min | 11.6 % |
| Whirlpool | Citra | 20 g | 0 min | 13.5 % |
| Whirlpool | Simcoe | 20 g | 0 min | 11.6 % |

| | | | | |
|---------|--------|------|----------|--------|
| Dry Hop | Citra | 20 g | 4 day(s) | 13.5 % |
| Dry Hop | Simcoe | 20 g | 4 day(s) | 11.6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale us-05 | Ale | Dry | 11.5 g | --- |