

ipa1

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **96**
- SRM **5.3**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

Steps

- Temp **64 C**, Time **75 min**
- Temp **76 C**, Time **15 min**

Mash step by step

- Heat up **18 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **75 min** at **64C**
- Keep mash **15 min** at **76C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale | 5 kg (83.3%) | 79 % | 6 |
| Grain | Strzegom Pszeniczny | 0.6 kg (10%) | 81 % | 6 |
| Grain | Carahell | 0.2 kg (3.3%) | 77 % | 26 |
| Grain | Płatki owsiane | 0.2 kg (3.3%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|------------------------|--------|----------|------------|
| Boil | Columbus/Tomahawk/Zeus | 50 g | 60 min | 15.5 % |
| Boil | Columbus/Tomahawk/Zeus | 35 g | 15 min | 15.5 % |
| Whirlpool | Simcoe | 50 g | 15 min | 13.2 % |
| Whirlpool | Centennial | 50 g | 15 min | 10.5 % |
| Whirlpool | Simcoe 70st | 50 g | 30 min | 13.2 % |
| Whirlpool | Amarillo 70st | 50 g | 30 min | 9.5 % |
| Dry Hop | Centennial | 50 g | 5 day(s) | 10.5 % |
| Dry Hop | Amarillo | 50 g | 5 day(s) | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|--------------|-----|-----|--------|-----------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |
|--------------|-----|-----|--------|-----------|