

Karafa

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **44**
- SRM **3.7**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **3 %**
- Size with trub loss **26.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **26.3 liter(s)**

Steps

- Temp **52 C**, Time **20 min**
- Temp **66 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **20.7 liter(s)** of strike water to **56.3C**
- Add grains
- Keep mash **20 min** at **52C**
- Keep mash **70 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **31.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|-----------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 4.4 kg (68.8%) | 80 % | 4 |
| Grain | Pszeniczny | 0.9 kg (14.1%) | 85 % | 4 |
| Adjunct | Pszenica niesłodowana | 0.8 kg (12.5%) | 75 % | 3 |
| Grain | Płatki owsiane | 0.3 kg (4.7%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil | Chinook | 10 g | 60 min | 13 % |
| Aroma (end of boil) | Citra | 38 g | 15 min | 12 % |
| Aroma (end of boil) | Amarillo | 45 g | 10 min | 9.5 % |
| Dry Hop | Amarillo | 25 g | 7 day(s) | 9.5 % |
| Dry Hop | Centennial | 50 g | 7 day(s) | 10.5 % |
| Dry Hop | Galaxy | 35 g | 7 day(s) | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale K-97 | Ale | Dry | 11 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------|-------------------|--------|---------|--------|
| Herb | Kaffir | 18 g | Boil | 10 min |
| Spice | Skurka Pomarańczy | 25 g | Boil | 10 min |
| Spice | Kardamon | 10 g | Boil | 10 min |