

APA KAFFIR 2 v7 #92

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **37**
- SRM **4.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **19.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **20.9 liter(s)**
- Boil time **75 min**
- Evaporation rate **17 %/h**
- Boil size **25.8 liter(s)**

Mash information

- Mash efficiency **76.2 %**
- Liquor-to-grist ratio **4.05 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **25.1 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **40 min**
- Temp **75 C**, Time **7 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **69.4C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **7 min** at **75C**
- Sparge using **10.7 liter(s)** of **76C** water or to achieve **25.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|-----------------|--------|-----|
| Grain | Viking - pilzneński | 0.336 kg (6.8%) | 80 % | 4 |
| Grain | Mep©Ale | 3.175 kg (64%) | 82.1 % | 5.5 |
| Grain | Bruntal - pszeniczny | 0.7 kg (14.1%) | 83 % | 5 |
| Grain | Płatki owsiane | 0.55 kg (11.1%) | 83 % | 3 |
| Grain | Płatki pszenne | 0.2 kg (4%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------|--------|----------|------------|
| Boil | Warrior | 14 g | 60 min | 14.7 % |
| Aroma (end of boil) | Sorachi Ace | 40 g | 5 min | 12.5 % |
| Aroma (end of boil) | Centennial | 30 g | 1 min | 9.5 % |
| Aroma (end of boil) | Citra | 15 g | 1 min | 13.5 % |
| Dry Hop | Centennial | 60 g | 3 day(s) | 9.5 % |
| Dry Hop | Citra | 20 g | 3 day(s) | 13.5 % |

Yeasts

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

| | | | | |
|-----------------------------|-----|-------|--------|------------------|
| FM54 Gorączka kalifornijska | Ale | Slant | 160 ml | Fermentum Mobile |
|-----------------------------|-----|-------|--------|------------------|

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------------|--------|---------|-------|
| Water Agent | gips | 2 g | Mash | --- |
| Water Agent | kwas mlekowy 80% [ml] | 4.11 g | Mash | --- |
| Water Agent | chlorek wapnia [ml] | 5.14 g | Mash | --- |
| Water Agent | epsom | 1.5 g | Mash | --- |
| Water Agent | mech irlandzki | 3 g | Boil | 5 min |
| Flavor | kaffir | 15 g | Boil | 5 min |
| Flavor | skórka pomarańczy | 30 g | Boil | 5 min |