

## APA v26 #142

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- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **29**
- SRM **4.4**
- Style **American Pale Ale**

### Batch size

- Expected quantity of finished beer **19.5 liter(s)**
- Trub loss **2.5 %**
- Size with trub loss **20.4 liter(s)**
- Boil time **70 min**
- Evaporation rate **20.5 %/h**
- Boil size **25.5 liter(s)**

### Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.85 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **18.9 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **7 min**

### Mash step by step

- Heat up **15 liter(s)** of strike water to **72C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **7 min** at **77C**
- Sparge using **14.4 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | pilzneński - viking  | 1.5 kg (38.5%) | 80 %  | 3.6 |
| Grain | pale ale - viking    | 1.5 kg (38.5%) | 80 %  | 5.5 |
| Grain | płatki owsiane       | 0.4 kg (10.3%) | 83 %  | 3   |
| Grain | pszeniczny - besmalz | 0.3 kg (7.7%)  | 82 %  | 5   |
| Grain | biscuit - chateau    | 0.2 kg (5.1%)  | 77 %  | 50  |

### Hops

| Use for             | Name             | Amount | Time     | Alpha acid |
|---------------------|------------------|--------|----------|------------|
| Boil                | Warrior          | 9 g    | 60 min   | 14.7 %     |
| Aroma (end of boil) | Simcoe           | 20 g   | 5 min    | 12.9 %     |
| Aroma (end of boil) | Galaxy           | 10 g   | 5 min    | 15.9 %     |
| Aroma (end of boil) | Falconers Flight | 50 g   | 1 min    | 10.4 %     |
| Dry Hop             | Falconers Flight | 50 g   | 2 day(s) | 10.4 %     |
| Dry Hop             | Simcoe           | 10 g   | 2 day(s) | 12.9 %     |

### Yeasts

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

|                 |     |        |       |            |
|-----------------|-----|--------|-------|------------|
| San Diego Super | Ale | Liquid | 70 ml | White Labs |
|-----------------|-----|--------|-------|------------|

### Extras

| Type        | Name                   | Amount | Use for  | Time   |
|-------------|------------------------|--------|----------|--------|
| Water Agent | gips                   | 3 g    | Mash     | ---    |
| Water Agent | kwask mlekowy 80% [ml] | 4.55 g | Mash     | ---    |
| Water Agent | chlerek wapnia [ml]    | 0 g    | Mash     | ---    |
| Water Agent | epsom                  | 0.5 g  | Mash     | ---    |
| Water Agent | mech irlandzki         | 3 g    | Boil     | 10 min |
| Water Agent | kwask askorbinowy      | 3 g    | Bottling | ---    |