

APA v26 #142

- 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 | --- |