

APA

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **53**
- SRM **4.9**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.5 liter(s)**
- Total mash volume **19.4 liter(s)**

Steps

- Temp **67 C**, Time **90 min**

Mash step by step

- Heat up **14.5 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (82.5%) | 79 % | 5 |
| Grain | Karmelowy 50 | 0.25 kg (5.2%) | 75 % | 50 |
| Grain | Płatki owsiane | 0.6 kg (12.4%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | Chinook | 10 g | 60 min | 13 % |
| Boil | Amarillo | 10 g | 30 min | 9.5 % |
| Boil | Simcoe | 10 g | 30 min | 13.2 % |
| Boil | Citra | 10 g | 30 min | 12 % |
| Aroma (end of boil) | Amarillo | 10 g | 5 min | 9.5 % |
| Aroma (end of boil) | Simcoe | 10 g | 5 min | 13.2 % |
| Aroma (end of boil) | Citra | 10 g | 5 min | 12 % |
| Dry Hop | Amarillo | 30 g | 3 day(s) | 9.5 % |
| Dry Hop | Simcoe | 30 g | 3 day(s) | 13.2 % |
| Dry Hop | Citra | 30 g | 3 day(s) | 12 % |

Yeasts

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

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

Extras

| Type | Name | Amount | Use for | Time |
|--------|----------------|--------|---------|--------|
| Fining | mech irlandzki | 5 g | Boil | 10 min |