

APA 3

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **35**
- SRM **5.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **15 %/h**
- Boil size **18.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12.4 liter(s)**
- Total mash volume **15.5 liter(s)**

Steps

- Temp **67 C**, Time **60 min**

Mash step by step

- Heat up **12.4 liter(s)** of strike water to **72.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **9 liter(s)** of **76C** water or to achieve **18.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Pilzneński | 2.2 kg (71%) | 81 % | 4 |
| Grain | Strzegom Karmel 30 | 0.3 kg (9.7%) | 75 % | 30 |
| Grain | Strzegom Monachijski typ II | 0.5 kg (16.1%) | --- % | 22 |
| Grain | Oats, Flaked | 0.1 kg (3.2%) | --- % | 2 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | Chinook | 5 g | 30 min | 13 % |
| Aroma (end of boil) | Chinook | 5 g | 15 min | 13 % |
| Aroma (end of boil) | Mosaic | 5 g | 15 min | 10 % |
| Whirlpool | Mosaic | 5 g | 0 min | 10 % |
| Dry Hop | Cascade | 10 g | 7 day(s) | 6 % |
| Dry Hop | Oktawia | 10 g | 7 day(s) | 7.1 % |
| Boil | Mosaic | 5 g | 30 min | 10 % |
| Boil | Magnum | 5 g | 60 min | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|--------|---------|--------|
| Fining | mech irlandzki | 3 g | Boil | 60 min |
| Water Agent | gips piwowarski | 2 g | Mash | 60 min |