

# AIPA

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- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **67**
- SRM **6.5**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **17.5 liter(s)**
- Trub loss **7 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **27 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **26.2 liter(s)**

## Steps

- Temp **60 C**, Time **0 min**
- Temp **64 C**, Time **60 min**
- Temp **71 C**, Time **15 min**
- Temp **76 C**, Time **4 min**

## Mash step by step

- Heat up **19.6 liter(s)** of strike water to **66.7C**
- Add grains
- Keep mash **0 min** at **60C**
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **71C**
- Keep mash **4 min** at **76C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **27 liter(s)** of wort

## Fermentables

| Type  | Name              | Amount          | Yield | EBC |
|-------|-------------------|-----------------|-------|-----|
| Grain | Pilzneński        | 3.28 kg (50.1%) | 81 %  | 4   |
| Grain | Pale Ale malt     | 1.99 kg (30.4%) | 80 %  | 5   |
| Grain | Pszeniczny        | 0.64 kg (9.8%)  | 81 %  | 6   |
| Grain | Wiedeński         | 0.16 kg (2.4%)  | 79 %  | 10  |
| Grain | Monachijski typ I | 0.29 kg (4.4%)  | 79 %  | 16  |
| Grain | Caramunich Typ II | 0.19 kg (2.9%)  | 73 %  | 120 |

## Hops

| Use for             | Name               | Amount | Time   | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil                | Citra 2016         | 30 g   | 60 min | 14.2 %     |
| Boil                | Nelson Sauvín 2016 | 25 g   | 15 min | 11.1 %     |
| Boil                | Cascade 2017       | 25 g   | 10 min | 9 %        |
| Boil                | Nelson Sauvín 2016 | 25 g   | 5 min  | 11.1 %     |
| Boil                | Amarillo 2017      | 25 g   | 5 min  | 8.9 %      |
| Aroma (end of boil) | Citra 2016         | 20 g   | 0 min  | 14.2 %     |
| Aroma (end of boil) | Cascade 2017       | 25 g   | 0 min  | 9 %        |

|                     |               |      |          |       |
|---------------------|---------------|------|----------|-------|
| Aroma (end of boil) | Amarillo 2017 | 25 g | 0 min    | 8.9 % |
| Dry Hop             | Citra 2017    | 50 g | 3 day(s) | 12 %  |
| Dry Hop             | Amarillo 2017 | 50 g | 3 day(s) | 8.9 % |
| Dry Hop             | Mosaic 2017   | 50 g | 3 day(s) | 10 %  |

## Yeasts

| Name                 | Type | Form  | Amount | Laboratory       |
|----------------------|------|-------|--------|------------------|
| FM52 Amerykański Sen | Ale  | Slant | 100 ml | Fermentum Mobile |

## Extras

| Type        | Name                       | Amount | Use for | Time |
|-------------|----------------------------|--------|---------|------|
| Water Agent | Sól z Epsom (pół łyżeczki) | 2 g    | Mash    | ---  |
| Water Agent | Kwas mlekowy 80% (1ml)     | 1 g    | Mash    | ---  |