

# AIPA z zestawem #1 - Browar na Wyżynie

- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **45**
- SRM **6.7**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **6 %**
- Size with trub loss **22.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **27.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.3 liter(s)**
- Total mash volume **23 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**

## Mash step by step

- Heat up **17.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Sparge using **15.6 liter(s)** of **76C** water or to achieve **27.1 liter(s)** of wort

## Fermentables

| Type  | Name                             | Amount         | Yield | EBC |
|-------|----------------------------------|----------------|-------|-----|
| Grain | pilzneński Viking Malt           | 3.5 kg (60.9%) | 81 %  | 4   |
| Grain | monachijski typ II Viking Malt   | 1 kg (17.4%)   | 78 %  | 22  |
| Grain | pszeniczny Viking Malt           | 1 kg (17.4%)   | 84 %  | 5   |
| Grain | cookie (bursztynowy) Viking Malt | 0.25 kg (4.3%) | 72 %  | 70  |

## Hops

| Use for             | Name                        | Amount | Time    | Alpha acid |
|---------------------|-----------------------------|--------|---------|------------|
| First Wort          | Warrior (USA) - granulát    | 10 g   | 100 min | 15.1 %     |
| Boil                | Chinook (USA) - granulát    | 10 g   | 20 min  | 11.1 %     |
| Boil                | Centennial (USA) - granulát | 10 g   | 20 min  | 8.5 %      |
| Boil                | Amarillo (USA) - granulát   | 10 g   | 20 min  | 7.5 %      |
| Aroma (end of boil) | Chinook (USA) - granulát    | 30 g   | 3 min   | 11.1 %     |

|                     |                             |      |          |        |
|---------------------|-----------------------------|------|----------|--------|
| Aroma (end of boil) | Centennial (USA) - granulát | 30 g | 3 min    | 8.5 %  |
| Aroma (end of boil) | Amarillo (USA) - granulát   | 30 g | 3 min    | 7.5 %  |
| Whirlpool           | Chinook (USA) - granulát    | 30 g | 0 min    | 11.1 % |
| Whirlpool           | Centennial (USA) - granulát | 30 g | 0 min    | 8.5 %  |
| Whirlpool           | Amarillo (USA) - granulát   | 30 g | 0 min    | 7.5 %  |
| Dry Hop             | Chinook (USA) - granulát    | 40 g | 3 day(s) | 11.1 % |
| Dry Hop             | Centennial (USA) - granulát | 40 g | 3 day(s) | 8.5 %  |
| Dry Hop             | Amarillo (USA) - granulát   | 40 g | 3 day(s) | 7.5 %  |

## Yeasts

| Name                        | Type | Form  | Amount | Laboratory       |
|-----------------------------|------|-------|--------|------------------|
| FM54 Gorączka kalifornijska | Ale  | Slant | 300 ml | Fermentum Mobile |

## Extras

| Type        | Name   | Amount | Use for   | Time     |
|-------------|--|--------|-----------|----------|
| Water Agent | Chlorek wapnia                                   | 1 g    | Mash      | 70 min   |
| Water Agent | Siarczan wapnia                                  | 3 g    | Mash      | 70 min   |
| Water Agent | Kwas fosforowy 75%                               | 5 g    | Mash      | 70 min   |
| Fining      | Mech irlandzki                                   | 2 g    | Boil      | 15 min   |
| Flavor      | Zest + sok z pomarańczy (6 pomarańczy)           | 85 g   | Secondary | 3 day(s) |
| Flavor      | Zest + sok (1 grajp) z grejpfruta (2 grejpfruta) | 80 g   | Secondary | 3 day(s) |
| Flavor      | Zest + sok z mandarynek (8 dużych mandarynek)    | 100 g  | Secondary | 3 day(s) |

## Notes

- Whirlpool temp < 80C 30min  
<https://www.brewersfriend.com/mash-chemistry-and-brewing-water-calculator/?id=0PSQ93Y>

Ca+2 Mg+2 Na+ Cl- SO4-2 HCO  
136.3 11.9 4.9 40.4 119.2 1.002  
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