

## Alianci I PA

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **49**
- SRM **8.1**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

### Mash information

- Mash efficiency **81 %**
- Liquor-to-grist ratio **3.7 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25.4 liter(s)**

### Steps

- Temp **65 C**, Time **75 min**
- Temp **78 C**, Time **2 min**

### Mash step by step

- Heat up **20 liter(s)** of strike water to **71.1C**
- Add grains
- Keep mash **75 min** at **65C**
- Keep mash **2 min** at **78C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

### Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Pale Malt (2 Row) US | 5 kg (92.6%)  | 79 %  | 4   |
| Grain | Strzegom Karmel 150  | 0.4 kg (7.4%) | 75 %  | 150 |

### Hops

| Use for | Name       | Amount | Time     | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil    | Warrior    | 15 g   | 60 min   | 15.5 %     |
| Boil    | Centennial | 10 g   | 20 min   | 10.5 %     |
| Boil    | Pilgrim    | 10 g   | 20 min   | 11 %       |
| Boil    | Centennial | 15 g   | 10 min   | 10.5 %     |
| Boil    | Pilgrim    | 15 g   | 10 min   | 11 %       |
| Dry Hop | Centennial | 35 g   | 7 day(s) | 10.5 %     |
| Dry Hop | Pilgrim    | 35 g   | 7 day(s) | 11 %       |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11 g   | Safale     |

### Extras

| Type   | Name           | Amount | Use for | Time   |
|--------|----------------|--------|---------|--------|
| Other  | Uwodnić Mech   | 0 g    | Boil    | 60 min |
| Other  | Chłodnica      | 0 g    | Boil    | 15 min |
| Fining | Mech irlandzki | 4 g    | Boil    | 10 min |