

# Samuraj

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **35**
- SRM **5.8**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.5 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **11.1 liter(s)**
- Total mash volume **14.8 liter(s)**

## Steps

- Temp **66 C**, Time **30 min**

## Mash step by step

- Heat up **11.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **30 min** at **66C**
- Sparge using **7.1 liter(s)** of **76C** water or to achieve **14.5 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Pilzneński           | 2.5 kg (67.6%) | 81 %  | 4   |
| Grain | Pszeniczny           | 0.5 kg (13.5%) | 85 %  | 4   |
| Grain | Carabelge            | 0.4 kg (10.8%) | 80 %  | 30  |
| Grain | Weyermann - Carapils | 0.3 kg (8.1%)  | 78 %  | 4   |

## Hops

| Use for             | Name       | Amount | Time   | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil                | Magnum     | 15 g   | 30 min | 13.5 %     |
| Aroma (end of boil) | Centennial | 15 g   | 10 min | 10.5 %     |

## Yeasts

| Name         | Type | Form  | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale  | Slant | 200 ml | Fermentis  |

## Extras

| Type  | Name                             | Amount | Use for   | Time     |
|-------|----------------------------------|--------|-----------|----------|
| Other | suszona skórka pomarańczy        | 20 g   | Secondary | 5 day(s) |
| Other | herbata sencha jaśminowa - napar | 30 g   | Secondary | 2 day(s) |

|       |                            |      |           |          |
|-------|----------------------------|------|-----------|----------|
| Other | trawa cytrynowa -<br>napar | 20 g | Secondary | 2 day(s) |
|-------|----------------------------|------|-----------|----------|

### Notes

- Samuraj to APA o zdecydowanym aromacie jaśminu pochodzącym z dodanej na etapie fermentacji cichej senchy jaśminwej. Smak wzmocniony cytrusową świeżością pochodzącą z dodatku trawy cytrynowej oraz suszonej skórki pomarańczy  
*May 5, 2017, 12:08 AM*