

# Angielska IPA z pędami sosny inne chmiele

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **25**
- SRM **6.3**
- Style **English IPA**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **1 %**
- Size with trub loss **25.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **1 %/h**
- Boil size **26.1 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.4 liter(s)**
- Total mash volume **23.2 liter(s)**

## Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **17.4 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

## Fermentables

| Type  | Name                      | Amount         | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 5.5 kg (94.8%) | 85 %  | 7   |
| Grain | Weyermann - Caraamber     | 0.3 kg (5.2%)  | 75 %  | 65  |

## Hops

| Use for | Name     | Amount | Time     | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil    | horizon  | 10 g   | 60 min   | 14 %       |
| Boil    | minstrel | 10 g   | 15 min   | 9.8 %      |
| Boil    | horizon  | 10 g   | 15 min   | 14 %       |
| Boil    | Fuggles  | 10 g   | 1 min    | 4.5 %      |
| Boil    | minstrel | 10 g   | 1 min    | 9.8 %      |
| Dry Hop | horizon  | 10 g   | 5 day(s) | 14 %       |
| Dry Hop | Fuggles  | 10 g   | 5 day(s) | 4.5 %      |
| Dry Hop | minstrel | 10 g   | 5 day(s) | 9.8 %      |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|             |     |     |        |        |
|-------------|-----|-----|--------|--------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |
|-------------|-----|-----|--------|--------|

### Extras

| Type   | Name              | Amount | Use for | Time   |
|--------|-------------------|--------|---------|--------|
| Flavor | pȩdy sosny - sok | 250 g  | Boil    | 15 min |