

# kwaśne tropikalne pszeniczne ale

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **15**
- SRM **3.4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **45 liter(s)**
- Trub loss **5 %**
- Size with trub loss **51.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **61.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **38.5 liter(s)**
- Total mash volume **49.5 liter(s)**

## Steps

- Temp **45 C**, Time **10 min**
- Temp **50 C**, Time **10 min**
- Temp **55 C**, Time **10 min**
- Temp **62 C**, Time **20 min**
- Temp **66 C**, Time **15 min**
- Temp **70 C**, Time **10 min**
- Temp **77 C**, Time **10 min**

## Mash step by step

- Heat up **38.5 liter(s)** of strike water to **48.6C**
- Add grains
- Keep mash **10 min** at **45C**
- Keep mash **10 min** at **50C**
- Keep mash **10 min** at **55C**
- Keep mash **20 min** at **62C**
- Keep mash **15 min** at **66C**
- Keep mash **10 min** at **70C**
- Keep mash **10 min** at **77C**
- Sparge using **34.4 liter(s)** of **76C** water or to achieve **61.9 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount        | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Pszeniczny          | 5 kg (43.5%)  | 85 %  | 4   |
| Grain | Pilzneński          | 5 kg (43.5%)  | 81 %  | 4   |
| Grain | zakwaszający        | 0.5 kg (4.3%) | 80 %  | 6   |
| Grain | Płatki owsiane      | 0.5 kg (4.3%) | 60 %  | 3   |
| Sugar | sok marakuja nfc 5l | 0.5 kg (4.3%) | 100 % | 0   |

## Hops

| Use for             | Name            | Amount | Time   | Alpha acid |
|---------------------|-----------------|--------|--------|------------|
| Boil                | Hallertau Blanc | 15 g   | 60 min | 11 %       |
| Boil                | Chinook         | 10 g   | 60 min | 13 %       |
| Aroma (end of boil) | Cascade         | 15 g   | 5 min  | 6 %        |
| Aroma (end of boil) | Ariana          | 10 g   | 5 min  | 10.6 %     |

|                     |      |      |       |       |
|---------------------|------|------|-------|-------|
| Aroma (end of boil) | Zula | 10 g | 0 min | 8.3 % |
|---------------------|------|------|-------|-------|

## Yeasts

| Name                             | Type | Form | Amount | Laboratory |
|----------------------------------|------|------|--------|------------|
| Lallemand - WildBrew Philly Sour | Ale  | Dry  | 20 g   | Lallemand  |

## Notes

- drożdże 60 pln  
chmiele 4,5 pln  
*Dec 1, 2024, 10:11 PM*