

# Sour IPA

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- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **41**
- SRM **4.1**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23 liter(s)**
- Boil time **90 min**
- Evaporation rate **5 %/h**
- Boil size **25.8 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **52 C**, Time **10 min**
- Temp **63 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **57.3C**
- Add grains
- Keep mash **10 min** at **52C**
- Keep mash **20 min** at **63C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **25.8 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount        | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Pilzneński           | 3 kg (50%)    | 81 %  | 4   |
| Grain | Pszeniczny           | 1.5 kg (25%)  | 85 %  | 4   |
| Grain | Słód owsiany Fawcett | 1 kg (16.7%)  | 61 %  | 5   |
| Grain | Chit Malt            | 0.5 kg (8.3%) | 50 %  | 2   |

## Hops

| Use for             | Name                   | Amount | Time     | Alpha acid |
|---------------------|------------------------|--------|----------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 20 g   | 60 min   | 13.6 %     |
| Aroma (end of boil) | Wai-iti                | 5 g    | 0 min    | 4.1 %      |
| Aroma (end of boil) | Riwaka                 | 5 g    | 0 min    | 4.3 %      |
| Whirlpool           | Columbus/Tomahawk/Zeus | 15 g   | 30 min   | 13.6 %     |
| Whirlpool           | Huell Melon            | 20 g   | 20 min   | 5.7 %      |
| Whirlpool           | Wai-iti                | 20 g   | 20 min   | 4.1 %      |
| Whirlpool           | Riwaka                 | 20 g   | 20 min   | 4.3 %      |
| Dry Hop             | Wai-iti                | 25 g   | 3 day(s) | 4.1 %      |

|         |             |      |          |       |
|---------|-------------|------|----------|-------|
| Dry Hop | Riwaka      | 25 g | 3 day(s) | 4.3 % |
| Dry Hop | Huell Melon | 30 g | 3 day(s) | 5.7 % |

## Yeasts

| Name                 | Type | Form | Amount | Laboratory     |
|----------------------|------|------|--------|----------------|
| WildBrew Philly Sour | Ale  | Dry  | 11 g   | LALLEMAND Inc. |

## Extras

| Type   | Name        | Amount | Use for | Time   |
|--------|-------------|--------|---------|--------|
| Fining | Whirlfloc T | 0.5 g  | Boil    | 15 min |

## Notes

- Kwas mlekowy - 1 ml do zacierania, 1.5 ml na 10 litrów do wysładzania  
 Dodatek siarczanu wapnia 0,3g na 10 litrów do zacierania i 0,7g do wysładzania na 10 litrów  
 Dodatek chlorku wapnia 1g na 10 litrów do zacierania i 2g do wysładzania na 10 litrów  
 Dodatek węglanu wapnia 0,25g do zacierania i 0,5g do wysładzania na 10 litrów  
 Dodatek 0,20g siarczanu magnezu do zacierania i 0,80g do wysładzania na 10 litrów  
 Dodatek witaminy C podczas chmielenia na zimno (4 g)  
 Chmielenie na zimno w dwóch dawkach - połowa podczas końca (3/5 dzień) fermentacji, druga połowa po ustaniu fermentacji. Chłodzenie, następnie zlanie z nad osadu.  
*Aug 30, 2024, 2:57 AM*