

## #Sour Imperial Ipa (WKPD)

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **36**
- SRM **6.2**
- Style **Imperial IPA**

### Batch size

- Expected quantity of finished beer **10.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.1 liter(s)**

### Mash information

- Mash efficiency **74 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **14.7 liter(s)**
- Total mash volume **19.1 liter(s)**

### Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

### Mash step by step

- Heat up **14.7 liter(s)** of strike water to **75.3C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **1 min** at **78C**
- Sparge using **4.9 liter(s)** of **76C** water or to achieve **15.1 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pale Ale          | 3 kg (67.4%)   | 79 %  | 6   |
| Grain | Pszeniczny                 | 0.5 kg (11.2%) | 85 %  | 4   |
| Grain | Strzegom Monachijski typ I | 0.3 kg (6.7%)  | 79 %  | 16  |
| Grain | Oats, Flaked               | 0.4 kg (9%)    | 80 %  | 2   |
| Grain | Rye Malt                   | 0.25 kg (5.6%) | 63 %  | 10  |

### Hops

| Use for | Name      | Amount | Time     | Alpha acid |
|---------|-----------|--------|----------|------------|
| Boil    | Magnum    | 20 g   | 60 min   | 12 %       |
| Dry Hop | El Dorado | 50 g   | 2 day(s) | 15 %       |
| Dry Hop | Mosaic    | 50 g   | 2 day(s) | 10 %       |
| Dry Hop | Citra     | 50 g   | 2 day(s) | 12 %       |

### Yeasts

| Name                      | Type | Form    | Amount | Laboratory |
|---------------------------|------|---------|--------|------------|
| L. plantarum (z serowara) | Ale  | Culture | 10 g   | ---        |
| Safale US-05              | Ale  | Dry     | 11.5 g | Fermentis  |

## Extras

| Type        | Name         | Amount | Use for | Time  |
|-------------|--------------|--------|---------|-------|
| Water Agent | Kwas mlekowy | 20 g   | Boil    | 5 min |

## Notes

- Zakwaszanie metodą kettle sour (najpierw zakwaszanie, potem gotowanie i chmienie).  
*Aug 23, 2019, 8:57 PM*