

# Sour duble IPA

---

- Gravity **19.8 BLG**
- ABV **8.7 %**
- IBU **45**
- SRM **6.9**

## Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **16.9 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **24 liter(s)**
- Total mash volume **30 liter(s)**

## Steps

- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **24 liter(s)** of strike water to **70.6C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **-1.1 liter(s)** of **76C** water or to achieve **16.9 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount       | Yield | EBC |
|-------|------------------------|--------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 5 kg (83.3%) | 80 %  | 7   |
| Grain | Pszeniczny             | 1 kg (16.7%) | 85 %  | 4   |

## Hops

| Use for | Name     | Amount | Time     | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil    | Citra    | 15 g   | 60 min   | 12 %       |
| Boil    | Mosaic   | 50 g   | 10 min   | 10 %       |
| Boil    | Citra    | 35 g   | 1 min    | 12 %       |
| Dry Hop | Amarillo | 200 g  | 2 day(s) | 9.5 %      |

## Yeasts

| Name                 | Type | Form  | Amount | Laboratory       |
|----------------------|------|-------|--------|------------------|
| FM52 Amerykański Sen | Ale  | Slant | 100 ml | Fermentum Mobile |

## Extras

| Type  | Name     | Amount | Use for | Time   |
|-------|----------|--------|---------|--------|
| Other | sanprobi | 10 g   | Boil    | 36 min |