

Hoppy Sour

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **11**
- SRM **5.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

Steps

- Temp **63 C**, Time **50 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **12.6 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **50 min** at **63C**
- Keep mash **20 min** at **72C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Pilzneński | 3.5 kg (83.3%) | 81 % | 4 |
| Grain | Pszeniczny | 0.5 kg (11.9%) | 85 % | 4 |
| Grain | Abbey Malt Weyermann | 0.2 kg (4.8%) | 75 % | 45 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil | lunga | 10 g | 20 min | 11 % |
| Dry Hop | Zula | 65 g | 2 day(s) | 8.3 % |
| Dry Hop | Książęcy | 55 g | 2 day(s) | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|-------|--------|------------|
| Safale US-05 | Ale | Slant | 150 ml | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|--------------|--------|---------|----------|
| Water Agent | gips | 3 g | Mash | 60 min |
| Other | sanprobi ibs | 5 g | Primary | 2 day(s) |

| | | | | |
|--------|-----------|-----|------|-------|
| Fining | whirflock | 1 g | Boil | 1 min |
|--------|-----------|-----|------|-------|