

#020 Sour APA

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **42**
- SRM **3.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **14.5 %/h**
- Boil size **15.9 liter(s)**

Mash information

- Mash efficiency **86 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6 liter(s)**
- Total mash volume **8 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **15.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|--------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 1.6 kg (80%) | 85 % | 7 |
| Grain | Platki ryzowe | 0.3 kg (15%) | 85 % | 0.7 |
| Grain | Weyermann - Carapils | 0.1 kg (5%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|----------|--------|----------|------------|
| Boil | Citra | 10 g | 60 min | 12 % |
| Aroma (end of boil) | Amarillo | 10 g | 5 min | 9.5 % |
| Aroma (end of boil) | Mosaic | 20 g | 5 min | 10 % |
| Whirlpool | Amarillo | 10 g | 10 min | 9.5 % |
| Whirlpool | Mosaic | 10 g | 10 min | 10 % |
| Dry Hop | Citra | 15 g | 3 day(s) | 12 % |
| Dry Hop | Amarillo | 30 g | 3 day(s) | 9.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale | Dry | 11.5 g | Fermentis |

Extras

| Type | Name | Amount | Use for | Time |
|--------|------------|--------|---------|--------|
| Fining | whirfloc t | 1.25 g | Boil | 15 min |