

Sour duple 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 |