

Sour APA

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **87**
- SRM **5.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **8 liter(s)**
- Trub loss **5 %**
- Size with trub loss **8.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **10.6 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.1 liter(s)**
- Total mash volume **9.4 liter(s)**

Steps

- Temp **65 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **7.1 liter(s)** of strike water to **72.4C**
- Add grains
- Keep mash **50 min** at **65C**
- Keep mash **10 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **5.9 liter(s)** of **76C** water or to achieve **10.6 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|-----------------|-------|-----|
| Grain | Strzegom Pilzneński | 1.5 kg (63.8%) | 80 % | 4 |
| Grain | Barley, Flaked | 0.2 kg (8.5%) | 70 % | 4 |
| Grain | Oats, Flaked | 0.4 kg (17%) | 80 % | 2 |
| Grain | Abbey Malt Weyermann | 0.25 kg (10.6%) | 75 % | 45 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|----------|------------|
| Boil | Equinox | 15 g | 15 min | 13.1 % |
| Whirlpool | Equinox | 35 g | 20 min | 13.1 % |
| Dry Hop | Equinox | 50 g | 3 day(s) | 13.1 % |
| Whirlpool | Eureka! | 20 g | 20 min | 18 % |
| Dry Hop | Eureka! | 50 g | 3 day(s) | 18 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------|------|--------|--------|------------------|
| FM13 Irlandzkie Ciemności | Ale | Liquid | 40 ml | Fermentum Mobile |

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|----------------------------|-----|-----|-----|------------|
| Lactobacillus Plantarum | Ale | Dry | 2 g | Serowar.pl |
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