

#33 Rye APA

- Gravity **11.7 BLG**
- ABV ---
- IBU **50**
- SRM **6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **26.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **28.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **35.1 liter(s)**

Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **15.6 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **24.7 liter(s)** of **76C** water or to achieve **35.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale | 4 kg (76.9%) | 79 % | 6 |
| Grain | Weyermann - Rye Malt | 1 kg (19.2%) | 85 % | 7 |
| Grain | Karmelowy Czerwony | 0.2 kg (3.8%) | 75 % | 59 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|----------------------------|--------|----------|------------|
| Boil | Magnum szyszka | 17 g | 60 min | 9.7 % |
| Boil | Cascade | 36 g | 20 min | 6.8 % |
| Boil | Simcoe (30 zabratem-Darek) | 20 g | 20 min | 13.2 % |
| Boil | Equinox | 10 g | 20 min | 13.4 % |
| Whirlpool | Cascade | 30 g | 0 min | 6.8 % |
| Whirlpool | Simcoe (30 zabratem-Darek) | 30 g | 0 min | 13.2 % |
| Whirlpool | Equinox | 27 g | 0 min | 13.4 % |
| Dry Hop | Cascade | 50 g | 7 day(s) | 6.8 % |
| Dry Hop | Simcoe (30 zabratem-Darek) | 20 g | 7 day(s) | 13.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safbrew S-33 | Ale | Dry | 11.5 g | Fermentis |