

Rye APA

- Gravity **12.1 BLG**
- ABV ---
- IBU **35**
- SRM **7.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **43 liter(s)**
- Trub loss **5 %**
- Size with trub loss **47.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **52 liter(s)**

Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **33.6 liter(s)**
- Total mash volume **42 liter(s)**

Steps

- Temp **50 C**, Time **5 min**
- Temp **66 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **33.6 liter(s)** of strike water to **53.8C**
- Add grains
- Keep mash **5 min** at **50C**
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **26.8 liter(s)** of **76C** water or to achieve **52 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|--------|-----|
| Grain | Pale Malt (2 Row) US | 6 kg (71.4%) | 79 % | 4 |
| Grain | Rye, Flaked | 2 kg (23.8%) | 78.3 % | 4 |
| Grain | Strzegom Karmel 150 | 0.4 kg (4.8%) | 75 % | 150 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|--------|--------|--------|------------|
| Boil | Magnum | 60 g | 60 min | 10.6 % |