

## Apa 2019:)

---

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **37**
- SRM ---

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

### Fermentables

| Type  | Name                     | Amount        | Yield | EBC |
|-------|--------------------------|---------------|-------|-----|
| Grain | Pale ale(niemcy)         | 4 kg (72.7%)  | --- % | --- |
| Grain | Pszeniczny jasny(niemcy) | 1 kg (18.2%)  | --- % | --- |
| Grain | Carmel pils              | 0.3 kg (5.5%) | --- % | --- |
| Grain | Platki owsiane (błysk.)  | 0.2 kg (3.6%) | --- % | --- |

### Hops

| Use for | Name             | Amount | Time   | Alpha acid |
|---------|------------------|--------|--------|------------|
| Boil    | Chinook          | 17 g   | 50 min | 11.3 %     |
| Boil    | Sauthern Passion | 20 g   | 15 min | 11.7 %     |
| Boil    | African Queen    | 15 g   | 7 min  | 13.5 %     |
| Boil    | Sauthern Passion | 30 g   | 0 min  | 11.7 %     |
| Boil    | African Queen    | 15 g   | 0 min  | 13.5 %     |