

APA092018

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **32**
- SRM **4.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.9 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.1 liter(s)**
- Total mash volume **22.8 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Malteurop Pale Ale | 5.5 kg (96.5%) | 79 % | 6 |
| Grain | Karmelowy Jasny 30EBC | 0.2 kg (3.5%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | Warrior | 20 g | 60 min | 15.5 % |
| Aroma (end of boil) | Cascade | 20 g | 3 min | 6 % |
| Aroma (end of boil) | Simcoe | 20 g | 3 min | 13.2 % |
| Dry Hop | Cascade | 30 g | 2 day(s) | 6 % |
| Dry Hop | Simcoe | 20 g | 2 day(s) | 13.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| US05 | Ale | Dry | 11 g | --- |