

Apa

- Gravity **13.1 BLG**
- ABV ---
- IBU **44**
- SRM **4.2**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 4.5 kg (90%) | 80 % | 5 |
| Grain | Pszeniczny | 0.5 kg (10%) | 85 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|--------|------------|
| Boil | Magnum | 20 g | 60 min | 13.5 % |
| Boil | Galaxy | 10 g | 10 min | 15 % |
| Boil | Cascade | 10 g | 10 min | 6 % |
| Boil | Galaxy | 10 g | 5 min | 15 % |
| Boil | Cascade | 10 g | 5 min | 6 % |
| Whirlpool | Cascade | 10 g | 1 min | 6 % |
| Whirlpool | Galaxy | 10 g | 1 min | 15 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 11 g | Fermentis |