

166 APA

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **45**
- SRM **3.8**
- 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 **80 min**
- Evaporation rate **5 %/h**
- Boil size **25.6 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3.25 liter(s) / kg**
- Mash size **14.9 liter(s)**
- Total mash volume **19.5 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 4 kg (87%) | 80 % | 5 |
| Grain | Strzegom Pszeniczny | 0.3 kg (6.5%) | 81 % | 6 |
| Grain | Carapils | 0.3 kg (6.5%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|----------|--------|----------|------------|
| Boil | Warrior | 15 g | 50 min | 13.5 % |
| Boil | Magnum | 10 g | 50 min | 14 % |
| Boil | Amarillo | 15 g | 20 min | 9.4 % |
| Boil | Amarillo | 15 g | 1 min | 9.4 % |
| Dry Hop | Amarillo | 15 g | 5 day(s) | 11.1 % |
| Dry Hop | Citra | 15 g | 5 day(s) | 13.6 % |
| Dry Hop | Simcoe | 15 g | 5 day(s) | 13.2 % |

Yeasts

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