

APA alko

- Gravity **13.1 BLG**
- ABV **5.3 %**
- IBU **25**
- SRM **4.8**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **300000 liter(s)**
- Trub loss **5 %**
- Size with trub loss **315000 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **379500 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **234000 liter(s)**
- Total mash volume **312000 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|------------------------|------------------|-------|-----|
| Grain | Briess - Pale Ale Malt | 60000 kg (76.9%) | 80 % | 7 |
| Grain | Pszeniczny | 12000 kg (15.4%) | 85 % | 4 |
| Grain | Płatki owsiane | 6000 kg (7.7%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|----------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 200000 g | 60 min | 15.5 % |
| Boil | Amarillo | 10000 g | 20 min | 9.5 % |
| Boil | Lublin (Lubelski) | 70000 g | 60 min | 4 % |
| Aroma (end of boil) | Amarillo | 8000 g | 20 min | 9.5 % |