

aaa

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **86**
- SRM **10.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **43 liter(s)**
- Trub loss **5 %**
- Size with trub loss **45.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **54.5 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27.6 liter(s)**
- Total mash volume **36.8 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|---------|----------------------|-----------------|-------|-----|
| Grain | Viking Pale Ale malt | 7 kg (72.1%) | 80 % | 5 |
| Grain | Pszeniczny | 1.71 kg (17.6%) | 85 % | 4 |
| Grain | Caraaroma | 0.5 kg (5.1%) | 78 % | 400 |
| Adjunct | płatki | 0.5 kg (5.1%) | --- % | --- |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 66 g | 60 min | 15.5 % |
| Boil | Lublin (Lubelski) | 40 g | 15 min | 4 % |
| Boil | Citra | 50 g | 10 min | 12 % |
| Aroma (end of boil) | Citra | 50 g | 20 min | 12 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale | Dry | 23 g | --- |