

żytnia APA

- Gravity **13.3 BLG**
- ABV ---
- IBU **42**
- SRM **4.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **46 liter(s)**
- Trub loss **5 %**
- Size with trub loss **48.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **58.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **33 liter(s)**
- Total mash volume **44 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|--------------|-------|-----|
| Grain | Viking Pale Ale malt | 8 kg (72.7%) | 80 % | 5 |
| Grain | Żytni | 3 kg (27.3%) | 85 % | 8 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | iung | 20 g | 60 min | 12 % |
| Boil | Citra | 20 g | 15 min | 12 % |
| Boil | Centennial | 10 g | 15 min | 10.5 % |
| Boil | Chinook | 30 g | 15 min | 13 % |
| Boil | Citra | 20 g | 7 min | 12 % |
| Aroma (end of boil) | Centennial | 20 g | 7 min | 10.5 % |
| Aroma (end of boil) | Chinook | 30 g | 7 min | 13 % |
| Aroma (end of boil) | Citra | 20 g | 0 min | 12 % |
| Aroma (end of boil) | Centennial | 20 g | 0 min | 10.5 % |
| Aroma (end of boil) | Chinook | 40 g | 0 min | 13 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale | Dry | 20 g | --- |