

Żytnia APA

- Gravity **13.6 BLG**
- ABV **5.6 %**
- IBU **39**
- SRM **6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 3.5 kg (57.4%) | 80 % | 4 |
| Grain | Żytni | 2 kg (32.8%) | 85 % | 8 |
| Grain | Carahell | 0.3 kg (4.9%) | 77 % | 26 |
| Grain | Karmelowy Czerwony | 0.3 kg (4.9%) | 75 % | 59 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil | Columbus | 25 g | 60 min | 14.5 % |
| Aroma (end of boil) | Cascade | 20 g | 15 min | 6 % |
| Aroma (end of boil) | Centennial | 20 g | 0 min | 8.5 % |
| Dry Hop | Cascade | 20 g | 4 day(s) | 6 % |
| Dry Hop | Centennial | 20 g | 4 day(s) | 8.5 % |

Yeasts

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