

Junior APA

- Gravity **11 BLG**
- ABV **4.4 %**
- IBU **41**
- SRM **4.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **80 min**
- Evaporation rate **12 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **5.5 liter(s) / kg**
- Mash size **24.8 liter(s)**
- Total mash volume **29.3 liter(s)**

Steps

- Temp **66 C**, Time **45 min**
- Temp **72 C**, Time **75 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **24.8 liter(s)** of strike water to **70.2C**
- Add grains
- Keep mash **45 min** at **66C**
- Keep mash **75 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **7.5 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 3 kg (66.7%) | 80 % | 5 |
| Grain | Strzegom Żytni | 0.5 kg (11.1%) | 85 % | 8 |
| Grain | Płatki owsiane | 0.5 kg (11.1%) | 85 % | 3 |
| Grain | Viking Dekstrynowy | 0.2 kg (4.4%) | 79 % | 13 |
| Grain | Caramel/Crystal Malt - 10L | 0.3 kg (6.7%) | 75 % | 20 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------|--------|----------|------------|
| Boil | Chinook | 15 g | 20 min | 13 % |
| Boil | Chinook | 15 g | 10 min | 13 % |
| Boil | Equinox | 15 g | 10 min | 12.8 % |
| Boil | Citra | 15 g | 10 min | 12.5 % |
| Aroma (end of boil) | Equinox | 35 g | 1 min | 12.8 % |
| Aroma (end of boil) | Citra | 35 g | 1 min | 12.5 % |
| Aroma (end of boil) | Chinook | 5 g | 1 min | 13 % |
| Dry Hop | Citra | 30 g | 4 day(s) | 11.6 % |

| | | | | |
|---------|--------|------|----------|--------|
| Dry Hop | Mosaic | 50 g | 4 day(s) | 13.2 % |
|---------|--------|------|----------|--------|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------------------|------|--------|--------|------------|
| FM52 Amerykański Sen | Ale | Liquid | 100 ml | --- |
| Gozdawa U.S. West Coast | Ale | Dry | 11 g | Danstar |