

Low-alc APA

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **19**
- SRM **4.5**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **27.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **33 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.2 liter(s)**
- Total mash volume **21.6 liter(s)**

Steps

- Temp **74 C**, Time **60 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **16.2 liter(s)** of strike water to **83C**
- Add grains
- Keep mash **60 min** at **74C**
- Keep mash **1 min** at **78C**
- Sparge using **22.2 liter(s)** of **76C** water or to achieve **33 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Strzegom Pilzneński | 1 kg (18.5%) | 80 % | 4 |
| Grain | Strzegom Pale Ale | 3 kg (55.6%) | 79 % | 6 |
| Grain | Strzegom Wiedeński | 1 kg (18.5%) | 79 % | 10 |
| Grain | Carared | 0.2 kg (3.7%) | 75 % | 39 |
| Grain | Weyermann - Carapils | 0.2 kg (3.7%) | 78 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|-----------|--------|----------|------------|
| Whirlpool | Zula | 20 g | 20 min | 7 % |
| Whirlpool | El Dorado | 20 g | 20 min | 15 % |
| Whirlpool | Idaho 7 | 20 g | 20 min | 12 % |
| Dry Hop | Zula | 120 g | 3 day(s) | 7 % |
| Dry Hop | El Dorado | 30 g | 3 day(s) | 15 % |
| Dry Hop | Idaho 7 | 30 g | 3 day(s) | 14 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|----------------------|-----|--------|---------|------------------|
| FM52 Amerykański Sen | Ale | Liquid | 1000 ml | Fermentum Mobile |
|----------------------|-----|--------|---------|------------------|

Extras

| Type | Name | Amount | Use for | Time |
|-------------|---------------------|--------|---------|-------|
| Water Agent | Pozywka dla drozdzy | 3 g | Boil | 2 min |