

ales

- Gravity **12.3 BLG**
- ABV ---
- IBU **56**
- SRM **5.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **20 liter(s)**

Steps

- Temp **65 C**, Time **60 min**

Mash step by step

- Heat up **15 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **17.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|-------------|-------|-----|
| Grain | Strzegom Pale Ale | 5 kg (100%) | 79 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|---------|--------|---------|------------|
| Boil | chinook | 30 g | 60 min | 11.2 % |
| Boil | chinook | 20 g | 30 min | 11.2 % |
| Whirlpool | enigma | 150 g | 120 min | 16.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-----------------------------------|------|------|--------|------------|
| Mangrove Jack's M44 US West Coast | Ale | Dry | 11 g | --- |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|-----------------|--------|---------|--------|
| Fining | mech irlandzki | 10 g | Boil | 15 min |
| Water Agent | gips piwowarski | 5 g | Mash | 60 min |