

#1

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **121**
- SRM **4.6**
- 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 **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

Fermentables

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

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|--------|------------|
| First Wort | Denali | 25 g | 60 min | 14.2 % |
| Boil | Denali | 25 g | 30 min | 14.2 % |
| Aroma (end of boil) | Denali | 50 g | 20 min | 14.2 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------------------------|------|------|--------|-----------------|
| Mangrove Jack's -M15 Empire Ale | Ale | Dry | 10 g | Mangrove Jack's |