NEAPA

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **41**
- SRM **3.7**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **12 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14.3 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.4 liter(s) / kg**
- Mash size **8 liter(s)**
- Total mash volume **10.3 liter(s)**

Steps

- Temp **66 C**, Time **90 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **8 liter(s)** of strike water to **72.7C**
- Add grains
- Keep mash **90 min** at **66C**
- Keep mash **5 min** at **76C**
- Sparge using **8.6 liter(s)** of **76C** water or to achieve **14.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	1.5 kg *(64.1%)*	79 %	6
Grain	Płatki owsiane	0.44 kg *(18.8%)*	85 %	3
Grain	Płatki żytnie	0.4 kg *(17.1%)*	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	45 min	8.8 %
Boil	Marynka	25 g	0 min	8.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M42 New World Strong Ale	Ale	Dry	11.5 g	---