

# MAKOS NEIPA 123

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **22**
- SRM **5.7**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **28 liter(s)**
- Trub loss **10 %**
- Size with trub loss **33.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **40 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.65 liter(s) / kg**
- Mash size **28.1 liter(s)**
- Total mash volume **38.7 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**

## Mash step by step

- Heat up **28.1 liter(s)** of strike water to **77.1C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **22.5 liter(s)** of **76C** water or to achieve **40 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (46.3%)	79 %	6
Grain	Strzegom Pszeniczny	2.8 kg (25.9%)	81 %	6
Grain	Płatki owsiane	1.5 kg (13.9%)	60 %	3
Grain	płatki jęczmienne	0.8 kg (7.4%)	60 %	4
Grain	Strzegom Monachijski typ II	0.5 kg (4.6%)	79 %	22
Adjunct	Łuska ryżowa	0.2 kg (1.9%)	1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Zula	50 g	1 min	13 %
Whirlpool	Citra	50 g	10 min	12 %
Whirlpool	Sabro	50 g	10 min	15 %
Whirlpool	Ahhhroma	28 g	10 min	16 %
Dry Hop	Citra	50 g	16 day(s)	12 %
Na po starcie fermentacji burzliwej				
Dry Hop	Sabro	50 g	16 day(s)	15 %
Po starcie fermentacji burzliwej				
Dry Hop	Zula	50 g	16 day(s)	13 %
Po starcie fermentacji burzliwej				

Dry Hop	Zappa	28 g	3 day(s)	8 %
Dry Hop	Nelson Sauvin	28 g	3 day(s)	13 %
Dry Hop	Sabro	28 g	3 day(s)	15 %
Dry Hop	Zula	28 g	3 day(s)	8.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew S-33	Ale	Dry	23 g	Fermentis