

Tropical Storm

- Gravity **20.9 BLG**
- ABV ---
- IBU **120**
- SRM **19.2**
- Style **Imperial IPA**

Batch size

- Expected quantity of finished beer **26 liter(s)**
- Trub loss **15 %**
- Size with trub loss **30.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **36.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **24.5 liter(s)**
- Total mash volume **31.5 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **69 C**, Time **20 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **24.5 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **20 min** at **69C**
- Keep mash **5 min** at **78C**
- Sparge using **18.6 liter(s)** of **76C** water or to achieve **36.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (50%)	79 %	6
Grain	Pszeniczny	1 kg (10%)	85 %	4
Grain	Crystal	1 kg (10%)	75 %	200
Liquid Extract	WES ekstrakt słodowy jasny	3 kg (30%)	80 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	100 g	60 min	13.5 %
Boil	Enigma (AUS)	20 g	20 min	17.2 %
Boil	Galaxy	20 g	20 min	15 %
Boil	Enigma (AUS)	30 g	5 min	17.2 %
Boil	Galaxy	30 g	5 min	15 %
Boil	Citra	25 g	5 min	12 %
Boil	Mosaic	25 g	5 min	10 %
Boil	Amarillo	25 g	5 min	9.5 %
Dry Hop	Enigma (AUS)	50 g	7 day(s)	17.2 %

Dry Hop	Galaxy	50 g	7 day(s)	15 %
Dry Hop	Citra	25 g	7 day(s)	12 %
Dry Hop	Mosaic	25 g	7 day(s)	10 %
Dry Hop	Amarillo	25 g	7 day(s)	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-05	Ale	Dry	23 g	Safale