

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 |