

Piekielne Klify 3

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **128**
- SRM **7.2**
- Style **Imperial IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Steps

- Temp **65 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **21 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **70 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (71.4%)	79 %	6
Grain	Strzegom Monachijski typ II	2 kg (28.6%)	79 %	22

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Enigma (AUS)	20 g	60 min	18.1 %
Boil	El Dorado	35 g	40 min	12.4 %
Boil	Enigma (AUS)	30 g	30 min	18.1 %
Boil	Ekuanot	35 g	20 min	14.1 %
Aroma (end of boil)	Amarillo	20 g	10 min	8.5 %
Dry Hop	Enigma (AUS)	50 g	7 day(s)	18.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Slant	150 ml	Safale