

Indiana

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **54**
- SRM **4.5**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.5 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.7 liter(s)**
- Total mash volume **31.6 liter(s)**

Steps

- Temp **62 C**, Time **45 min**
- Temp **72 C**, Time **15 min**

Mash step by step

- Heat up **23.7 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **45 min** at **62C**
- Keep mash **15 min** at **72C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **31.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	BESTMALZ - Bestt Pale Ale	1.35 kg (17.1%)	80.5 %	6
Grain	Pszeniczny	0.5 kg (6.3%)	85 %	4
Grain	Strzegom Pilzneński	5 kg (63.3%)	80 %	4
Grain	Płatki owsiane	0.8 kg (10.1%)	60 %	3
Grain	Rye, Flaked	0.25 kg (3.2%)	78.3 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	10 g	60 min	13.5 %
Aroma (end of boil)	Cascade	25 g	5 min	6.5 %
Aroma (end of boil)	Simcoe	25 g	2 min	12.8 %
Aroma (end of boil)	Mosaic	30 g	0 min	11.8 %
Aroma (end of boil)	Amarillo	50 g	0 min	10.1 %
Boil	Warrior	10 g	50 min	13.5 %
Boil	Warrior	10 g	50 min	13.5 %
Whirlpool	Cascade	25 g	10 min	6 %
Whirlpool	Amarillo	50 g	10 min	9.5 %

Whirlpool	Simcoe	25 g	10 min	13.2 %
Whirlpool	Mosaic	20 g	10 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	1300 ml	Fermentum Mobile