

## rozruch cobra

---

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **67**
- SRM **5.6**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **26.3 liter(s)**

### Steps

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

### Mash step by step

- Heat up **21 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **60 min** at **68C**
- Sparge using **9.6 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg (95.2%)	85 %	7
Grain	Karmelowy Jasny 30EBC Viking	0.25 kg (4.8%)	75 %	30

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga pellet	30 g	60 min	11 %
Aroma (end of boil)	Marynka	30 g	10 min	10 %
Whirlpool	Vic Secret	30 g	20 min	19.2 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	---