

# Ray IPA

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **57**
- SRM **4.9**
- 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.1 kg (66.1%)	81 %	4
Grain	Żytni	2 kg (32.3%)	85 %	8
Adjunct	łuska ryżowa	0.1 kg (1.6%)	--- %	---

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Warrior	25 g	40 min	15.5 %
Boil	Warrior	25 g	20 min	15.5 %
Whirlpool	Contennial	50 g	1 min	10.9 %
Dry Hop	Citra	50 g	7 day(s)	12 %
Dry Hop	contennial	50 g	7 day(s)	10.9 %
Dry Hop	Cascade	50 g	7 day(s)	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Slant	150 ml	Fermentum Mobile

## Notes

- Pierdzieli sie filtracja trzeba dużo łuski ryżowej min 0.5 kg  
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