

## Dudeales - Rye IPA [#20]

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **44**
- SRM **9.1**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **19.5 liter(s)**
- Trub loss **6 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **20 %/h**
- Boil size **26.2 liter(s)**

### Mash information

- Mash efficiency **79 %**
- Liquor-to-grist ratio **4.25 liter(s) / kg**
- Mash size **21.5 liter(s)**
- Total mash volume **26.5 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **21.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **78C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **26.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński [Weyermann]	2 kg (36%)	81 %	5
Grain	Żytni [Weyermann]	1.5 kg (27%)	85 %	8
Grain	Maris Otter [Fawcett]	1 kg (18%)	81 %	6
Grain	Płatki owsiane [Lidl]	0.5 kg (9%)	57 %	2
Sugar	Cukier Trzcinowy [Lidl]	0.5 kg (9%)	100 %	0
Grain	Czekoladowy ciemny [Viking Malt]	0.05 kg (0.9%)	68 %	1200

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Tomahawk [USA]	30 g	30 min	15.5 %
Aroma (end of boil)	Palisade [USA]	30 g	10 min	7.5 %
Dry Hop	Ahtanum [USA]	30 g	3 day(s)	4 %
Dry Hop	Liberty [USA]	30 g	3 day(s)	4.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	250 ml	Safale

## Extras

Type	Name	Amount	Use for	Time
Fining	Mech irlandzki	5 g	Boil	10 min