

# Black Ipa DR. RUDI

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **44**
- SRM **28.4**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **10 %**
- Size with trub loss **18 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.9 liter(s)**
- Total mash volume **25.6 liter(s)**

## Steps

- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **19.9 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **20 min** at **62C**
- Keep mash **40 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **22.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4.5 kg (78.9%)	81 %	4
Grain	Carafa II	0.2 kg (3.5%)	70 %	1200
Grain	Monachijski	0.8 kg (14%)	80 %	16
Grain	Jęczmień palony	0.2 kg (3.5%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	30 min	13.5 %
Aroma (end of boil)	Dr Rudi	20 g	10 min	11.7 %
Whirlpool	Dr Rudi	20 g	10 min	11.7 %
Dry Hop	Dr Rudi	40 g	5 day(s)	11.7 %
Dry Hop	Dr Rudi	50 g	3 day(s)	11.7 %
Boil	Sybilla	20 g	15 min	5.5 %