

# Black Vermont IPA

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- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **73**
- SRM **9.8**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **17 liter(s)**
- Trub loss **5 %**
- Size with trub loss **17.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **21.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **13.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **12.6 liter(s)** of **76C** water or to achieve **21.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1 kg (22.2%)	80 %	5
Grain	Słód Pilsner® 2,5-4,5 EBC Weyermann	1 kg (22.2%)	80 %	4
Grain	Słód karmelowy monach. Caramunich® typ III Weyermann	0.5 kg (11.1%)	76 %	150
Grain	Płatki pszeniczne	0.5 kg (11.1%)	85 %	3
Grain	Viking Pilsner malt	1 kg (22.2%)	82 %	4
Grain	Płatki owsiane	0.5 kg (11.1%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	20 g	60 min	12 %
Boil	Cascade	20 g	45 min	6 %
Boil	Amarillo	20 g	30 min	9.5 %
Aroma (end of boil)	Citra	20 g	10 min	12 %
Dry Hop	Citra	20 g	5 day(s)	12 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us-05	Ale	Dry	10 g	---