

# Dolina Muminków

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **42**
- SRM **3.9**
- Style **White IPA**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **68 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **45 min** at **68C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **15.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (66.7%)	81 %	4
Grain	Pszeniczny	1.7 kg (28.3%)	85 %	4
Grain	Płatki owsiane	0.3 kg (5%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sybilla	30 g	60 min	7 %
Boil	Columbus	10 g	20 min	15.8 %
Aroma (end of boil)	Vic Secret	15 g	10 min	18.5 %
Dry Hop	Vic Secret	15 g	3 day(s)	18.5 %
Boil	Columbus/Tomahawk/Zeus	10 g	5 min	15.5 %

## Yeasts

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