

# Mundek

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **29**
- SRM **6.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.4 liter(s)**
- Total mash volume **11.2 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **8.4 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **76C**
- Sparge using **9.6 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	2 kg (71.4%)	85 %	7
Grain	Platki owsiane	0.2 kg (7.1%)	85 %	3
Grain	Honey Malt	0.3 kg (10.7%)	80 %	49
Grain	Pszeniczny	0.3 kg (10.7%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Cascade	10 g	60 min	7 %
Boil	Citra	10 g	15 min	11 %
Boil	Cascade	10 g	15 min	7 %
Dry Hop	Citra	20 g	3 day(s)	11 %
Dry Hop	Cascade	20 g	3 day(s)	7 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	11.5 g	Mangrove Jack's

## Extras

Type	Name	Amount	Use for	Time
Water Agent	chlorek wapnia	5 g	Mash	60 min

### Notes

- Zakładane IBU 34.  
Kwas fosforowy 1ml do wstydzenia.  
*Oct 2, 2017, 3:50 PM*