

# LEM | Australian Pale Ale

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **31**
- SRM **5.1**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **2.5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **11.5 %/h**
- Boil size **28.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.1 liter(s) / kg**
- Mash size **13.2 liter(s)**
- Total mash volume **19.5 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **13.2 liter(s)** of strike water to **79.5C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **72C**
- Keep mash **0 min** at **76C**
- Sparge using **22 liter(s)** of **76C** water or to achieve **28.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.5 kg (87.3%)	80 %	5
28 zł				
Grain	Karmelowy Jasny 30EBC	0.25 kg (4%)	75 %	30
3,6 zł				
Grain	Weyermann - Carapils	0.25 kg (4%)	78 %	4
3,6 zł				
Grain	Strzegom Monachijski typ I	0.3 kg (4.8%)	79 %	16
1,7 zł				

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Enigma (AUS)	10 g	60 min	16.5 %
12,5 zł				
Boil	Enigma (AUS)	20 g	15 min	16.5 %
Aroma (end of boil)	Vic Secret	20 g	0 min	18.4 %

13,5 zł				
Dry Hop	Enigma (AUS)	20 g	7 day(s)	16.5 %
Dry Hop	Vic Secret	30 g	7 day(s)	18.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Mangrove Jack's M44 US West Coast	Ale	Dry	11 g	Mangrove Jack's
14 zł				

## Notes

- Zakładane straty:  
 Odparowanie wody - 2.5L (12.5% z 20L)  
 Straty z gotowania (chmiel + muł) - 2.5 L  
 Fermentacja burzliwa - 0.5L  
 Fermentacja cicha - 0.5L  
*Jun 3, 2019, 5:36 PM*
- Koszt: 77 zł  
*Jun 30, 2019, 2:38 PM*