

## 17. MILKSHAKE IPA

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- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **57**
- SRM **5**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **9.8 liter(s)**
- Trub loss **5 %**
- Size with trub loss **10.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **12.4 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.4 liter(s)**
- Total mash volume **11.3 liter(s)**

### Steps

- Temp **55 C**, Time **15 min**
- Temp **67 C**, Time **45 min**
- Temp **77 C**, Time **10 min**

### Mash step by step

- Heat up **8.4 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **15 min** at **55C**
- Keep mash **45 min** at **67C**
- Keep mash **10 min** at **77C**
- Sparge using **6.8 liter(s)** of **76C** water or to achieve **12.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	2 kg (71.5%)	80 %	7
Grain	Pszeniczny	0.3 kg (10.7%)	85 %	4
Grain	Płatki owsiane	0.5 kg (17.8%)	85 %	3

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	9.92 g	60 min	13.5 %
Boil	Simcoe	9.92 g	30 min	13.2 %
Boil	Simcoe	9.92 g	10 min	13.2 %
Aroma (end of boil)	Centennial	7.09 g	1 min	10.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
American Ale 1056	Ale	Slant	100.6 ml	Wyeast

### Extras

Type	Name	Amount	Use for	Time
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Flavor	Maliny	1499.98 g	Secondary	4 day(s)
Flavor	Laktoza	699.95 g	Boil	15 min