

# Krzysiu Milkshake IPA z malinami

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- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **21**
- SRM **3.5**
- Style **American IPA**

## 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 **9 liter(s)**
- Total mash volume **12 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **76C**
- Sparge using **9.2 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilznieński	1.65 kg (49.3%)	81 %	4
Grain	Płatki owsiane	1 kg (29.9%)	65 %	3
Sugar	Milk Sugar (Lactose)	0.35 kg (10.4%)	76.1 %	0
Grain	Pszeniczny	0.35 kg (10.4%)	80 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	12 g	60 min	10 %