

# MilkyWay

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **29**
- SRM **26.9**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21.9 liter(s)**
- Total mash volume **28.1 liter(s)**

## Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **21.9 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **9.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	5 kg (80%)	85 %	7
Grain	Caraaroma	0.3 kg (4.8%)	78 %	400
Grain	Weyermann - Carafa I	0.2 kg (3.2%)	70 %	690
Grain	Jęczmień palony	0.2 kg (3.2%)	55 %	985
Grain	płatki jęczmienne	0.4 kg (6.4%)	--- %	---
Grain	Płatki pszeniczne	0.15 kg (2.4%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale

## Extras

Type	Name	Amount	Use for	Time
Flavor	laktoza	350 g	Boil	15 min

### Notes

- Płatki jęczmienne i pszenne kleikowane.  
*Sep 8, 2017, 9:32 PM*