

# MLECZNE WZGÓRZA

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **26**
- SRM **31.2**
- Style **Sweet Stout**

## Batch size

- Expected quantity of finished beer **23.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29.7 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.4 liter(s)**
- Total mash volume **23.6 liter(s)**

## Steps

- Temp **70 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

## Mash step by step

- Heat up **18.4 liter(s)** of strike water to **77.1C**
- Add grains
- Keep mash **60 min** at **70C**
- Keep mash **0 min** at **76C**
- Sparge using **16.6 liter(s)** of **76C** water or to achieve **29.7 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2 kg (32%)	80 %	5
Grain	Monachijski Ciemny Steinbach	2 kg (32%)	100 %	30
Grain	Karmelowy Pszeniczny Strzegom	0.5 kg (8%)	79 %	130
Grain	Cookie Malt	0.25 kg (4%)	58.7 %	150
Grain	Strzegom Czekoladowy ciemny	0.25 kg (4%)	68 %	1200
Grain	Jęczmień palony	0.25 kg (4%)	55 %	985
Sugar	Milk Sugar (Lactose)	1 kg (16%)	76.1 %	0

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mandarina Bavaria	15 g	60 min	10 %
Boil	Mandarina Bavaria	25 g	15 min	10 %
Boil	Mandarina Bavaria	15 g	5 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	300 ml	Safale

## Extras

Type	Name	Amount	Use for	Time
Flavor	Laktoza	1000 g	Boil	10 min