

# 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 |