

# Makos Ginger Sour Ale

- Gravity **18 BLG**
- ABV **7.7 %**
- IBU **38**
- SRM **5.6**
- Style **Berliner Weisse**

## Batch size

- Expected quantity of finished beer **28 liter(s)**
- Trub loss **15 %**
- Size with trub loss **35 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **41.6 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **28.8 liter(s)**
- Total mash volume **37.8 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **28.8 liter(s)** of strike water to **75.5C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **78C**
- Sparge using **21.8 liter(s)** of **76C** water or to achieve **41.6 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (45.5%)	80 %	4
Grain	Strzegom Pszeniczny	2 kg (18.2%)	81 %	6
Sugar	Miód Gryczany (Buckwheat Honey)	1 kg (9.1%)	100 %	20
Grain	Strzegom Pale Ale	2 kg (18.2%)	79 %	6
Adjunct	Płatki owsiane	1 kg (9.1%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Aroma (end of boil)	Sabro	50 g	1 min	15 %
Whirlpool	Sabro	50 g	15 min	15 %
Whirlpool	El Dorado	56 g	15 min	15 %
Whirlpool	Amarillo	70 g	15 min	9.5 %
Whirlpool	Vermelho	50 g	15 min	9 %
Dry Hop	Sabro	100 g	20 day(s)	15 %
Dry Hop	Amarillo	30 g	20 day(s)	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
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Lallemand - WildBrew Philly Sour	Ale	Dry	11.5 g	Lallemand
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### Extras

Type	Name	Amount	Use for	Time
Spice	imbir	185 g	Boil	1 min