

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 |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

| | | | | |
|----------------------------------|-----|-----|--------|-----------|
| Lallemand - WildBrew Philly Sour | Ale | Dry | 11.5 g | Lallemand |
|----------------------------------|-----|-----|--------|-----------|

Extras

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