

# Mgiełka

- Gravity **12.9 BLG**
- ABV ---
- IBU **49**
- SRM **3.7**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **40 min**
- Evaporation rate **12 %/h**
- Boil size **30.3 liter(s)**

## Mash information

- Mash efficiency **92 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.6 liter(s)**
- Total mash volume **20.8 liter(s)**

## Steps

- Temp **55 C**, Time **15 min**
- Temp **63 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **15.6 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **15 min** at **55C**
- Keep mash **50 min** at **63C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **19.9 liter(s)** of **76C** water or to achieve **30.3 liter(s)** of wort

## Fermentables

| Type  | Name                     | Amount         | Yield | EBC |
|-------|--------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński      | 3.1 kg (59.5%) | 80 %  | 4   |
| Grain | Viking Golden ale        | 0.4 kg (7.7%)  | 80 %  | 14  |
| Grain | Pszeniczny               | 0.5 kg (9.6%)  | 85 %  | 4   |
| Grain | Żytni Viking Mzlt        | 0.3 kg (5.8%)  | 85 %  | 8   |
| Grain | Słód owsiany Fawcett     | 0.21 kg (4%)   | 61 %  | 5   |
| Grain | Płatki owsiane           | 0.5 kg (9.6%)  | 60 %  | 3   |
| Grain | Viking Malt Enzymatyczny | 0.2 kg (3.8%)  | 82 %  | 7   |

## Hops

| Use for             | Name                   | Amount | Time   | Alpha acid |
|---------------------|------------------------|--------|--------|------------|
| Boil                | Columbus/Tomahawk/Zeus | 30 g   | 30 min | 15.5 %     |
| Boil                | Amarillo               | 25 g   | 15 min | 10.1 %     |
| Boil                | Amarillo               | 25 g   | 5 min  | 10.1 %     |
| Aroma (end of boil) | Amarillo               | 25 g   | 1 min  | 10.1 %     |
| Aroma (end of boil) | Mosaic                 | 25 g   | 1 min  | 11.8 %     |

|  |          |      |          |        |
|--|----------|------|----------|--------|
| Dry Hop                                  | Mosaic   | 25 g | 3 day(s) | 11.8 % |
| Talus CryoHops 25g odpowiada 50g peletu  |          |      |          |        |
| Dry Hop                                  | Amarillo | 25 g | 2 day(s) | 10.1 % |
| Mosaic CryoHops 25g odpowiada 50g peletu |          |      |          |        |
| Dry Hop                                  | Mosaic   | 50 g | 2 day(s) | 11.8 % |

## Yeasts

| Name             | Type | Form  | Amount | Laboratory     |
|------------------|------|-------|--------|----------------|
| Eitrheim - kveik | Ale  | Slant | 70 ml  | Kveik Yeastery |

## Extras

| Type        | Name           | Amount | Use for | Time   |
|-------------|----------------|--------|---------|--------|
| Water Agent | Kwas fosforowy | 2 g    | Mash    | 90 min |
| Water Agent | Chlorek wapnia | 5 g    | Mash    | 90 min |