

## Haze M

- Gravity **13.1 BLG**
- ABV ---
- IBU **28**
- SRM **2.9**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **6 %/h**
- Boil size **15.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **9.1 liter(s)**
- Total mash volume **12.2 liter(s)**

### Steps

- Temp **72 C**, Time **1 min**
- Temp **67 C**, Time **60 min**
- Temp **73 C**, Time **15 min**

### Mash step by step

- Heat up **9.1 liter(s)** of strike water to **74.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **1 min** at **72C**
- Keep mash **15 min** at **73C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **15.8 liter(s)** of wort

### Fermentables

| Type    | Name                         | Amount          | Yield | EBC |
|---------|------------------------------|-----------------|-------|-----|
| Adjunct | Mąka pszenna pełnoziarnistwa | 0.05 kg (1.6%)  | --- % | 3   |
| Grain   | Strzegom Pale Ale            | 2.65 kg (85.5%) | 79 %  | 2   |
| Grain   | Płatki owsiane               | 0.14 kg (4.5%)  | 85 %  | 3   |
| Grain   | Weyermann - Carapils         | 0.26 kg (8.4%)  | 78 %  | 4   |

### Hops

| Use for   | Name             | Amount  | Time      | Alpha acid |
|-----------|------------------|---------|-----------|------------|
| Boil      | Chinook          | 9.02 g  | 60 min    | 13 %       |
| Boil      | Palisade         | 13.27 g | 5 min     | 7.5 %      |
| Boil      | Cascade          | 13.27 g | 5 min     | 6 %        |
| Whirlpool | Palisade         | 13.27 g | 20 min    | 10 %       |
| Dry Hop   | Mosaic           | 10 g    | 0 day(s)  | 10 %       |
| Dry Hop   | Galaxy           | 10 g    | 4 day(s)  | 15 %       |
| Dry Hop   | Nelson Sauvignon | 10 g    | 7 day(s)  | 11 %       |
| Dry Hop   | Nelson Sauvignon | 15 g    | 11 day(s) | 11 %       |
| Dry Hop   | Galaxy           | 15 g    | 11 day(s) | 15 %       |

**Yeasts**

| Name  | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-05 | Ale  | Dry  | 7.53 g | ---        |