

# Mglisty Poranek

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **70**
- SRM **6.4**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **28.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **23.9 liter(s)**

## Steps

- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **40 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **18.2 liter(s)** of strike water to **70.9C**
- Add grains
- Keep mash **30 min** at **64C**
- Keep mash **40 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **16.3 liter(s)** of **76C** water or to achieve **28.8 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount        | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt   | 5 kg (87.7%)  | 85 %  | 7   |
| Grain | Weyermann - Acidulated Malt | 0.2 kg (3.5%) | 80 %  | 6   |
| Grain | Biscuit Malt                | 0.5 kg (8.8%) | 79 %  | 45  |

## Hops

| Use for             | Name     | Amount | Time      | Alpha acid |
|---------------------|----------|--------|-----------|------------|
| Boil                | Mosaic   | 30 g   | 50 min    | 10 %       |
| Boil                | Amarillo | 15 g   | 50 min    | 9.5 %      |
| Boil                | Mosaic   | 20 g   | 30 min    | 10 %       |
| Boil                | Amarillo | 10 g   | 30 min    | 9.5 %      |
| Aroma (end of boil) | Amarillo | 10 g   | 15 min    | 9.5 %      |
| Aroma (end of boil) | Amarillo | 15 g   | 5 min     | 9.5 %      |
| Dry Hop             | Mosaic   | 50 g   | 10 day(s) | 10 %       |
| Dry Hop             | Amarillo | 50 g   | 10 day(s) | 9.5 %      |

## Yeasts

| Name                              | Type | Form   | Amount   | Laboratory |
|-----------------------------------|------|--------|----------|------------|
| WLP060 - American Ale Yeast Blend | Ale  | Liquid | 0.035 ml | White Labs |

### Extras

| Type   | Name        | Amount | Use for | Time   |
|--------|-------------|--------|---------|--------|
| Flavor | Lemon grass | 30 g   | Boil    | 10 min |

### Notes

- Fermentacja burzliwa - 4 dni w temp. ok 18st. C, 3-4 dni w temp ok 20 st. C. Fermentacja cicha - 10 dni. Na 20 litrów piwa, do refermentacji trzeba ~100 gram cukru.  
*Oct 6, 2017, 8:48 AM*