

## amr 2

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **49**
- SRM **4.4**
- Style **American Wheat or Rye Beer**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.9 liter(s)**
- Total mash volume **24.3 liter(s)**

### Steps

- Temp **65 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

### Mash step by step

- Heat up **18.9 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **5 min** at **76C**
- Sparge using **14.3 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

| Type  | Name              | Amount         | Yield | EBC |
|-------|-------------------|----------------|-------|-----|
| Grain | Żytni             | 2.5 kg (46.4%) | 85 %  | 8   |
| Grain | Pilzneński        | 2.2 kg (40.8%) | 81 %  | 4   |
| Grain | Płatki jęczmienne | 0.54 kg (10%)  | 85 %  | 3   |
| Grain | Płatki pszeniczne | 0.15 kg (2.8%) | 85 %  | 3   |

### Hops

| Use for             | Name     | Amount | Time   | Alpha acid |
|---------------------|----------|--------|--------|------------|
| Boil                | ?        | 10 g   | 60 min | 8 %        |
| Boil                | Amarillo | 15 g   | 15 min | 8.3 %      |
| Boil                | Amarillo | 15 g   | 5 min  | 8.3 %      |
| Boil                | ekuanot  | 15 g   | 10 min | 14.5 %     |
| Aroma (end of boil) | ekuanot  | 15 g   | 5 min  | 14.5 %     |
| Boil                | Mosaic   | 30 g   | 15 min | 10 %       |
| Aroma (end of boil) | Mosaic   | 30 g   | 5 min  | 10 %       |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Safale     |

## Extras

| Type  | Name         | Amount | Use for | Time  |
|-------|--------------|--------|---------|-------|
| Other | łuska ryżowa | 100 g  | Boil    | 5 min |