

# Midwest IPA

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- Gravity **14 BLG**
- ABV **5.8 %**
- IBU **69**
- SRM **3.6**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **38 liter(s)**
- Trub loss **5 %**
- Size with trub loss **41.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **5 %/h**
- Boil size **47.9 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **30 liter(s)**
- Total mash volume **40 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **30 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- Sparge using **27.9 liter(s)** of **76C** water or to achieve **47.9 liter(s)** of wort

## Fermentables

| Type  | Name           | Amount       | Yield  | EBC |
|-------|----------------|--------------|--------|-----|
| Grain | Pilznieński    | 7 kg (65.1%) | 81 %   | 4   |
| Grain | Pszeniczny     | 2 kg (18.6%) | 85 %   | 4   |
| Grain | Oats, Malted   | 1 kg (9.3%)  | 80 %   | 2   |
| Sugar | Maltodekstryna | 0.75 kg (7%) | 76.1 % | 0   |

## Hops

| Use for   | Name            | Amount | Time     | Alpha acid |
|-----------|-----------------|--------|----------|------------|
| Boil      | lunga           | 75 g   | 60 min   | 11.5 %     |
| Whirlpool | Galaxy          | 50 g   | 20 min   | 16.2 %     |
| Whirlpool | Vermehlo        | 100 g  | 20 min   | 7 %        |
| Dry Hop   | Galaxy          | 200 g  | 3 day(s) | 15 %       |
| Dry Hop   | Mosaic          | 100 g  | 3 day(s) | 10 %       |
| Dry Hop   | Chinook         | 100 g  | 3 day(s) | 13 %       |
| Dry Hop   | Michigan Copper | 100 g  | 3 day(s) | 10 %       |

## Yeasts

| Name          | Type | Form  | Amount | Laboratory |
|---------------|------|-------|--------|------------|
| Lutra OYL-071 | Ale  | Slant | 200 ml | Omega      |

## Extras

| Type        | Name              | Amount | Use for | Time   |
|-------------|-------------------|--------|---------|--------|
| Water Agent | Lactic Acid       | 10 g   | Mash    | 60 min |
| Water Agent | CaCl <sub>2</sub> | 10 g   | Mash    | 60 min |
| Fining      | Whirlfloc-T       | 2.5 g  | Boil    | 10 min |