

# IPA v18 #135

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- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **57**
- SRM **6.3**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **16.9 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **25.7 %/h**
- Boil size **25.4 liter(s)**

## Mash information

- Mash efficiency **84.1 %**
- Liquor-to-grist ratio **3.27 liter(s) / kg**
- Mash size **15 liter(s)**
- Total mash volume **19.6 liter(s)**

## Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **77 C**, Time **7 min**

## Mash step by step

- Heat up **15 liter(s)** of strike water to **73.1C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **20 min** at **72C**
- Keep mash **7 min** at **77C**
- Sparge using **15 liter(s)** of **76C** water or to achieve **25.4 liter(s)** of wort

## Fermentables

| Type  | Name                   | Amount         | Yield | EBC |
|-------|------------------------|----------------|-------|-----|
| Grain | pale ale - viking      | 2.9 kg (63%)   | 80 %  | 5.5 |
| Grain | pszeniczny - bestmalz  | 0.25 kg (5.4%) | 82 %  | 5   |
| Grain | wiedeński - viking     | 0.7 kg (15.2%) | 79 %  | 8.6 |
| Grain | monachijski I - viking | 0.7 kg (15.2%) | 79 %  | 16  |
| Grain | Chateau - cara gold    | 0.05 kg (1.1%) | 78 %  | 120 |

## Hops

| Use for             | Name       | Amount | Time     | Alpha acid |
|---------------------|------------|--------|----------|------------|
| Boil                | Magnum     | 15 g   | 60 min   | 11.5 %     |
| Boil                | CTZ        | 30 g   | 13 min   | 10.7 %     |
| Aroma (end of boil) | Centennial | 50 g   | 5 min    | 10.5 %     |
| Aroma (end of boil) | Moutere    | 10 g   | 5 min    | 15.9 %     |
| Aroma (end of boil) | Mosaic     | 40 g   | 1 min    | 12.8 %     |
| Dry Hop             | Centennial | 40 g   | 2 day(s) | 10.5 %     |
| Dry Hop             | Mosaic     | 30 g   | 2 day(s) | 12.8 %     |
| Dry Hop             | Moutere    | 17 g   | 2 day(s) | 15.9 %     |

## Yeasts

| Name                 | Type | Form  | Amount | Laboratory       |
|----------------------|------|-------|--------|------------------|
| FM52 Amerykański Sen | Ale  | Slant | 150 ml | Fermentum Mobile |
| 2-dniowa gęstwa      |      |       |        |                  |

## Extras

| Type        | Name                   | Amount | Use for  | Time   |
|-------------|------------------------|--------|----------|--------|
| Water Agent | gips                   | 3 g    | Mash     | ---    |
| Water Agent | kwask mlekowy 80% [ml] | 4.36 g | Mash     | ---    |
| Water Agent | chlorek wapnia [ml]    | 0 g    | Mash     | ---    |
| Water Agent | epsom                  | 0.5 g  | Mash     | ---    |
| Water Agent | mech irlandzki         | 3 g    | Boil     | 15 min |
| Water Agent | kwask askorbinowy      | 3.4 g  | Bottling | ---    |