

## Moto GP 2

- Gravity **14.5 BLG**
- ABV **6 %**
- IBU **96**
- SRM **7.1**
- Style **American IPA**

### Batch size

- Expected quantity of finished beer **30 liter(s)**
- Trub loss **5 %**
- Size with trub loss **31.5 liter(s)**
- Boil time **80 min**
- Evaporation rate **10 %/h**
- Boil size **39.1 liter(s)**

### Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **21.3 liter(s)**
- Total mash volume **29.8 liter(s)**

### Steps

- Temp **55 C**, Time **1 min**
- Temp **64 C**, Time **60 min**
- Temp **71 C**, Time **15 min**
- Temp **77 C**, Time **4 min**

### Mash step by step

- Heat up **21.3 liter(s)** of strike water to **62C**
- Add grains
- Keep mash **1 min** at **55C**
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **71C**
- Keep mash **4 min** at **77C**
- Sparge using **26.3 liter(s)** of **76C** water or to achieve **39.1 liter(s)** of wort

### Fermentables

| Type  | Name                    | Amount         | Yield | EBC |
|-------|-------------------------|----------------|-------|-----|
| Grain | Viking Pilsner malt     | 6 kg (70.6%)   | 82 %  | 4   |
| Grain | Viking Wheat Malt       | 1.2 kg (14.1%) | 83 %  | 5   |
| Grain | Viking Munich Malt      | 0.9 kg (10.6%) | 78 %  | 18  |
| Grain | Cara Gold Castlemalting | 0.4 kg (4.7%)  | 78 %  | 120 |

### Hops

| Use for | Name                   | Amount | Time     | Alpha acid |
|---------|------------------------|--------|----------|------------|
| Boil    | Magnum                 | 50 g   | 60 min   | 13.5 %     |
| Boil    | Columbus/Tomahawk/Zeus | 50 g   | 15 min   | 15.5 %     |
| Boil    | Centennial             | 50 g   | 10 min   | 10.5 %     |
| Boil    | Simcoe                 | 50 g   | 5 min    | 13.2 %     |
| Boil    | Citra                  | 50 g   | 1 min    | 12 %       |
| Dry Hop | Centennial             | 50 g   | 5 day(s) | 10.5 %     |
| Dry Hop | Amarillo               | 100 g  | 5 day(s) | 9.5 %      |
| Dry Hop | Simcoe                 | 50 g   | 5 day(s) | 13.2 %     |

## Yeasts

| Name                  | Type | Form   | Amount | Laboratory  |
|-----------------------|------|--------|--------|-------------|
| Wyeast - American Ale | Ale  | Liquid | 150 ml | Wyeast Labs |

## Extras

| Type        | Name                | Amount | Use for | Time   |
|-------------|---------------------|--------|---------|--------|
| Water Agent | kwask fosforowy 75% | 1 g    | Mash    | 0 min  |
| Water Agent | Chlorek wapnia 33%  | 20 g   | Boil    | 80 min |