

Vermont IPA

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **28**
- SRM **4.7**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.5 liter(s)**
- Total mash volume **26 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **19.5 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|---------------|-------|-----|
| Grain | Weyermann - Pilsner Malt | 3 kg (46.2%) | 81 % | 5 |
| Grain | Viking Pale Ale malt | 2 kg (30.8%) | 80 % | 5 |
| Grain | Weyermann pszeniczny jasny | 0.5 kg (7.7%) | 80 % | 6 |
| Grain | Płatki pszeniczne | 0.5 kg (7.7%) | 85 % | 3 |
| Grain | Płatki owsiane | 0.5 kg (7.7%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Equinox | 10 g | 50 min | 13.1 % |
| Boil | Equinox | 20 g | 10 min | 13.1 % |
| Boil | Centennial | 20 g | 10 min | 10.5 % |
| Aroma (end of boil) | Mosaic | 10 g | 0 min | 10 % |
| Aroma (end of boil) | Centennial | 10 g | 0 min | 10.5 % |
| Aroma (end of boil) | Citra | 10 g | 0 min | 12 % |
| Aroma (end of boil) | Galaxy | 10 g | 0 min | 15 % |
| Whirlpool | Citra | 30 g | 0 min | 12 % |

| | | | | |
|-----------|------------|------|----------|--------|
| Whirlpool | Galaxy | 30 g | 0 min | 15 % |
| Dry Hop | Citra | 20 g | 2 day(s) | 12 % |
| Dry Hop | Galaxy | 20 g | 2 day(s) | 15 % |
| Dry Hop | Mosaic | 20 g | 2 day(s) | 10 % |
| Dry Hop | Centennial | 20 g | 2 day(s) | 10.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------|------|--------|--------|------------------|
| Safale S-04 | Ale | Dry | 11.5 g | Safale |
| FM55 Zielone Wzgórze | Ale | Liquid | 30 ml | Fermentum Mobile |

Extras

| Type | Name | Amount | Use for | Time |
|-------------|------------------|--------|---------|--------|
| Water Agent | chlorek wapnia | 10 g | Mash | 60 min |
| Water Agent | kwask mlekowy | 5 g | Mash | 60 min |
| Water Agent | siarczan magnezu | 1 g | Mash | 60 min |