

# RELIABLE AND EFFICIENT SOLUTIONS

From Development to a Flavorful Brew



Sigma-Aldrich understands the importance of having the highest quality and reliable products to make sure your beer that goes to market will be safe and consistent for all consumers.

Our products have been quality-tested and are provided with easily accessible third party validation to customers around the globe. Our expertise in supply chain management helps ensure the products you need arrive to you when you need them. With our breadth of products, quality and expertise, Sigma-Aldrich can be your partner for success in manufacturing and testing throughout the brewery process.

To learn more, contact our team at [ff@sial.com](mailto:ff@sial.com).

## MICROBIOLOGY TESTING

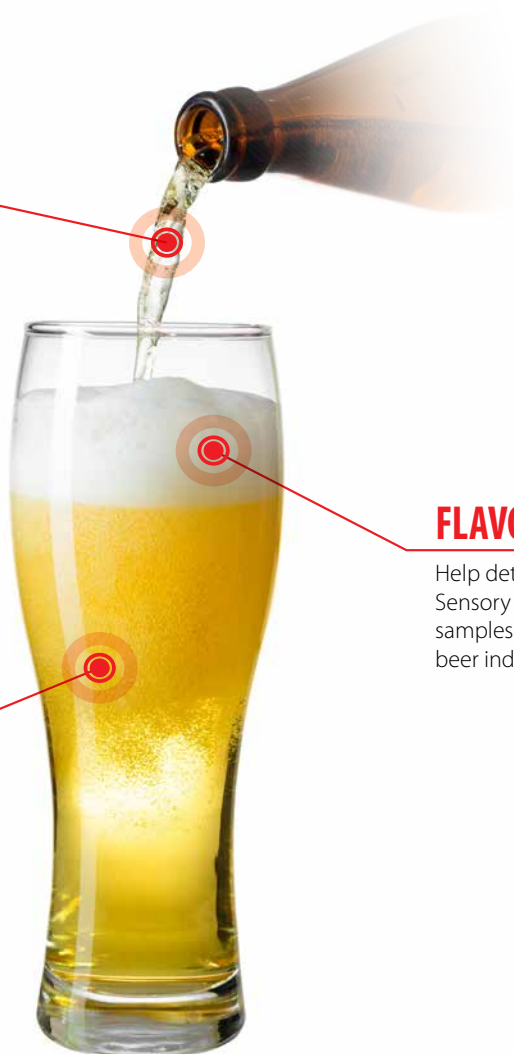
Offer innovative and reliable solutions, like our HybriScan™*D* Beer Kit, to test for microbial contamination so you can rest assured your product is safe for consumers.

## LAB CONSUMABLES

From solvents, to buffers and lab equipment; we offer the products you need for quick and easy testing solutions.

## FLAVOR INGREDIENTS

Help detect off notes in your Sensory programs by using our samples designed just for the beer industry.



# Product Highlights with the Beer Industry in Mind

## Natural Essences and Extracts From the Named Food (FTNF)

| Cat. No. | Product Name                | Product Description                        | FTNF Source  | Organoleptics                    |
|----------|-----------------------------|--|--|----------------------------------|
| W209000  | Angelica seed oil           | natural, FG                                | <i>Angelica archangelica</i>                                   | pepper                           |
| W209619  | Anise star oil              | natural, FG                                | <i>Illicium verum</i> Hook. f. (also Badiane)                  | anise                            |
| W530345  | Buchu leaf oil, Betulina    | natural, FG                                | <i>Barosma betulina</i>  | woody                            |
| W216900  | Buchu leaf oil, Crenulata   | natural, FG                                | <i>Barosma crenulata</i>                                       | minty                            |
| W227102  | Celery seed oil             | natural, FCC, FG                           | <i>Apium graveolens</i> L.                                     | spicy                            |
| W233100  | Cognac oil                  | green, natural, FG                         | <i>Vitis vinifera</i>  | fruity; wine-like                |
| W233404  | Coriander oil               | natural, FCC, FG                           | <i>Coriandrum sativum</i> L.                                   | fruity; sweet                    |
| W233609  | Costus oil                  | natural, FG                                | <i>Saussurea lappa</i> Clarke                                  | violet                           |
| W234300  | Cumin seed oil              | natural, FG                                | <i>Cuminum cyminum</i>   | sweet                            |
| W235900  | Davana oil                  | natural, FG                                | <i>Artemisia pallens</i>                                       | fruity; sweet                    |
| W250500  | Genet extract               | natural, FG                                | <i>Spartium junceum</i> L.                                     | honey; sweet                     |
| W250813  | Geranium oil, Chinese       | natural, FG                                | <i>Pelargonium graveolens</i>                                  | geranium                         |
| W252108  | Ginger extract              | natural, FG                                | <i>Zingiber officinale</i> Roscoe                              | ginger                           |
| W252204  | Ginger oil                  | natural, FCC, FG                           | <i>Zingiber officinale</i> Roscoe                              | lemon; woody; spicy; herbaceous  |
| W253006  | Grapefruit oil, Florida     | natural, FG                                | <i>Citrus paradisi</i> Macf.                                   | grapefruit                       |
| W261800  | Lavandin oil                | natural, FG                                | <i>Lavandula hybrida</i>                                       | herbaceous; woody; camphoraceous |
| W262218  | Lavender oil 40/42% fleurs  | natural, FG                                | <i>Lavandula officinalis</i> Chaix                             | lavender; spicy; floral          |
| W262404  | Lemongrass oil, East Indian | natural, FG                                | <i>Cymbopogon citratus</i> DC. and <i>Cymbopogon flexuosus</i> | lemon                            |
| W262600  | Lemon oil, terpeneless      | natural, FG                                | <i>Citrus limonum</i>  | lemon                            |
| W263109  | Lime oil                    | natural, purified by distillation, FCC, FG | <i>Citrus aurantifolia</i> Swingle (rutaceae)                  | lime                             |
| W530412  | Neroli extract              | natural, FG                                | <i>Citrus aurantium</i>  | floral                           |
| W284815  | Peppermint oil              | natural, FCC, FG                           | <i>Mentha piperita</i> L.                                      | minty; camphoraceous             |
| W290106  | Pimenta leaf oil            | natural, FCC, FG                           | <i>Pimenta officinalis</i> Lindl.                              | nutmeg                           |
| W290500  | Pine needle oil             | natural, FG                                | <i>Pinus</i> spp.  | turpentine                       |

## Solutions for Analysis

- **Watercol™ GC Columns** – Enabling injection of aqueous samples with sharp peak shapes.
- **SLB®-IL i-Series** – Ionic liquid GC Columns with unique selectivity and inertness, a robust alternative to PEG/Wax columns.
- **SUPELCOGEL™ Carbohydrate** – HPLC columns for accurate and precise sugar determination.
- **Ascentis® Express** – Based on Fused-Core® Particle Technology. Columns that give UHPLC performance on HPLC with a broad set of selectivities available.
- **TSKgel® OApak-P and OApak-A** – HPLC columns optimized for organic acid separation and analysis.
- **Vitroids™ and LENTICULE® Disks** – Certified Reference Microorganisms, for more confidence in consistent water quality.
- **Standards and Certified Reference Materials** – Offer a broad portfolio for the analysis of nutrients in beer. From simple to complex **carbohydrates** and standards to help detect compounds that could affect the **flavor** profile.
- **HybriScan™D Beer Kit** – Rapid detection and quantification of all relevant beer spoilage organisms of genus *Lactobacillus*, *Pediococcus*, *Pectinatus* and *Megasphaera*.

Our Scientists strive to provide a library of application notes to help those in the beer industry achieve successful testing results. If you do not find a testing method you are looking for on our **website**, feel free to contact us for technical support at **ff@sial.com**.

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