

TECH OFFER

Portable Salinity Monitoring for Liquid Foods



KEY INFORMATION

TECHNOLOGY CATEGORY:

Chemicals - Analysis

Foods - Quality & Safety

Foods - Ingredients

TECHNOLOGY READINESS LEVEL (TRL): TRL9

COUNTRY: THAILAND

ID NUMBER: TO175234

OVERVIEW

In the preparation of traditional Asian dishes such as soups, curries, and noodles, achieving the perfect balance of saltiness is crucial for flavor consistency. However, many chefs, food manufacturers, and home cooks rely on subjective taste assessments, which can lead to inconsistent results. This becomes particularly challenging when scaling up for mass production or when catering to individuals with specific dietary needs. Current salinity testing methods are often cumbersome, require lab equipment, or are not tailored for quick, accurate, and portable use in kitchen environments, making it difficult to ensure the precise salt levels necessary for quality control.

The technology provides a quick, accurate solution for measuring salinity in liquid foods like soups, curries, and noodles, ensuring consistent flavor balance. Its portable design and easy calibration with saline solution make it convenient for chefs, food manufacturers, and home cooks alike. The device displays precise salinity levels and uses intuitive facial icons for easy interpretation. By eliminating guesswork, the technology helps maintain flavor consistency, improves efficiency, and meets

dietary requirements with precision.

The technology owner is seeking partners in healthcare, catering, and food manufacturing for licensing and IP acquisition of the technology.

TECHNOLOGY FEATURES & SPECIFICATIONS

- **Salinity Range:** Measures salinity levels from 0.01% to 2.00% (g/100ml), providing precise readings for liquid foods such as soups, curries, and noodles.
- **Display:** Digital readout shows salinity in percentage, with an additional visual aid using three facial icons to indicate different levels of salinity.
- **Calibration:** Can be easily calibrated using standard saline solution for wound cleaning, ensuring accurate and reliable performance.
- **Portability:** Compact, lightweight design for easy handling and transport, making it ideal for use in kitchens, catering services, and food production facilities.
- **User-Friendly:** Intuitive interface designed for quick, on-the-go salinity checks, suitable for professional chefs, food manufacturers, and healthcare applications.

POTENTIAL APPLICATIONS

- **Food & Beverage:** Ensuring flavor consistency in liquid foods for restaurants and manufacturers and salinity control in mass food production and catering
- **Healthcare & Nutrition:** Monitoring sodium intake for dietary restrictions
- **Product Innovation:** Precision meters for commercial kitchens and home use.

UNIQUE VALUE PROPOSITION

- **Precision:** Provides accurate salinity measurements (0.01% to 2.00%) for liquid foods.
- **Portability:** Compact and lightweight for easy use in kitchens, catering, and home environments.
- **Ease of Use:** Features a digital display and intuitive facial icons for quick interpretation.
- **Calibration Flexibility:** Easily calibrated with standard saline solutions for reliable performance.
- **Versatile Applications:** Suitable for food manufacturers, chefs, healthcare providers, and home cooks.
- **Consistency & Quality:** Ensures flavor consistency and supports dietary sodium control.