



KYORITSU

PACKTEST

INSTRUCTIONS

Iron (Trivalent)

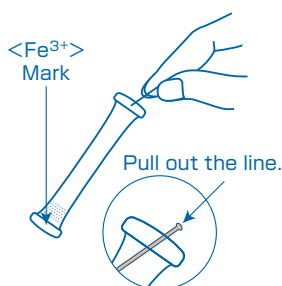
Model WAK-Fe³⁺

Sulfosalicylic Acid Visual Colorimetric Method

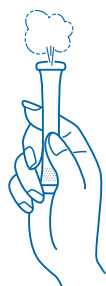
Main reagent: 5-Sulfosalicylic Acid Dihydrate

Range: Fe³⁺ 2 - 100 mg/L(ppm)

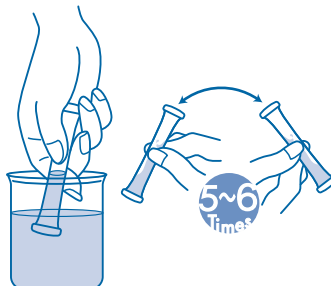
How to Use



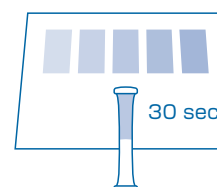
① Remove the colored line at the top of the tube to clear the aperture.



② Press tube's side wall to expel air, and hold the tube.



③ Immerse the aperture of the tube into the sample and release to fill the tube halfway. Shake the tube lightly 5-6 times.



④ After 30 seconds, compare the actual color in the tube with provided Standard Color.

You can check the result digitally.



How to Read the Test

After the reaction time, compare the color of the tube with Standard Color. The nearest color indicates the concentration value of the analyte in your sample. A color between two standard colors indicates a value between them.

Handling of PACKTEST Before and After Use

The content of the tube is **Strong Acid**.

First Aid **Eye contact** → Immediately flush eyes with water for at least 15 minutes, followed by consult with Ophthalmologist.

Skin contact → Immediately flush contacted area with water.

Ingestion → Immediately rinse mouth.

If ingesting the content, or any symptom appears, seek medical advice immediately. Please refer to SDS for further information.

Storage Keep unused PACKTEST tubes in the provided preserving bag after opening the laminated package, and use them as soon as possible. Depending on the storage condition, the reagent could deteriorate in several days, especially during the hot and humid weather.

Disposal For business use, please follow in a manner consistent with Federal, State, and Local Regulations. Otherwise, the tube can be disposed as combustible waste.



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PACKTEST Iron (Trivalent)

Feature

This product utilizes Sulfosalicylic Acid absorptiometry, and allows to measure Iron (Trivalent) in ionic state by just simple operation.

For measuring Iron (Divalent), please use PACKTEST Iron (Divalent) (model: WAK-Fe²⁺, measuring range: 0.2—10mg/L), and for dissolved Iron (Fe²⁺, Fe³⁺) please use PACKTEST Iron (model: WAK-Fe, measuring range: 0.2—10mg/L).

Caution

1. This product only measures ionic form of Iron (Trivalent) in the sample. Dissolved form of Iron will be substantially different depending on the pH level, and it could exist in suspension or precipitate in the sample. If measuring the Total Iron (including precipitated Iron like rusty water), please dissolve with diluted Sulfuric Acid and measure with PACKTEST Iron (model: WAK-Fe) or PACKTEST Iron (Low Range) (model: WAK-Fe(D)).
2. The optimum pH upon PACKTEST reaction will be 1. If the pH of the sample exceeds 1—9, it needs to be neutralized with diluted Sulfuric Acid or diluted Sodium Hydroxide solution prior to use.
3. When concentration value of Iron standard solution is 1000mg/L, the color will turn out darker than 100mg/L shown on the Standard Color. When the concentration value is expected to be very high, please dilute the sample prior to measurement.
4. Ensure that the PACKTEST tube is filled up to the half.
5. Even the reagent is not completely dissolved, it will not affect the reading.
6. Keep temperature of the sample between 15—40°C.
7. When comparing to the Standard Color, please be sure to read under the daylight or equivalent light source. It may be difficult to determine the closest color under the direct sunlight, certain florescent lights, mercury lamp, or LED.
8. You can put the line back into the tube to seal. This will avoid possibility of spilling the content of the tube.

Interference

Standard Color is prepared based on the standard solution. If there are some coexisting substances that may cause interference, please compare the result with official method or standard addition method for verification. Below is the list of interference data for acceptable level by adding each of the single substances to the standard solution.

≤1000mg/L	: Ag ⁺ , Al ³⁺ , B(III), Ba ²⁺ , Ca ²⁺ , Cd ²⁺ , Cl ⁻ , Fe ²⁺ , I ⁻ , K ⁺ , Mg ²⁺ , Mn ²⁺ , Na ⁺ , NH ₄ ⁺ , NO ₃ ⁻ , Pb ²⁺ , PO ₄ ³⁻ , SO ₄ ²⁻ , Zn ²⁺ , Anionic Surfactant, Residual Chlorine, Phenol, Silica
≤500mg/L	: Cu ²⁺ , Ni ²⁺
≤200mg/L	: Co ²⁺ , Cr ³⁺ , NO ₂ ⁻ , V(V)
≤100mg/L	: Mo(VI), Cationic Surfactant
≤50mg/L	: F ⁻
≤20mg/L	: Cr(VI)
≤5mg/L	: CN ⁻

Not suitable for measuring the seawater.

Reducible substances (e.g. Ascorbic Acid) will turn Fe³⁺ into Fe²⁺.

Digital Water Analyzer

If you prefer more detailed result in digital notation, please use with DIGITALPACKTEST Iron (Trivalent) (Model: DPM-Fe³⁺) or DIGITAL PACKTEST·MULTI. When measuring with these analyzer, the measuring range, reaction time, and interference information are different from PACKTEST (visual colorimetry).

Please refer to instruction manual for further information or contact us for more details.

[Caution]

- This product is made for water quality analyzing purpose only. Do not use for any other purpose.
 - This product contains small amount of chemicals. Please read instruction manual, GHS labels, MSDS, and other necessary document thoroughly prior to use.
 - Please keep this information handy for future reference.
- <Safety>
- Please wash your hands thoroughly before and after the test. Do not breathe the chemical reagents.
 - It is highly recommended to wear protective gloves, eye protection, and masks upon using this product.
 - Avoid release chemical reagents or waste solution to the environment.
- <Storage>
- Please keep this product out of reach of children. Keep it in the dry, cool, and dark place.
- <Other>
- Please check the expiration date shown on the box, and make sure to use within the date.
 - Specifications are subject to change without notice.



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