



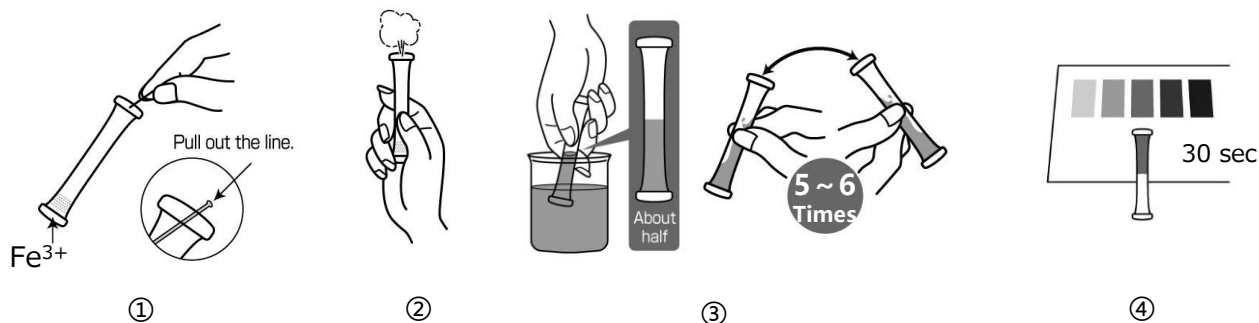
Iron (Trivalent)

Model: WAK-Fe3

Sulfosalicylic Acid Visual Colorimetric Method

Measuring Range: 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 the tube's side wall to expel air and hold the tube.
- ③ Immerse the aperture of the tube into the sample, release the finger to fill up the tube halfway. Invert the tube back and forth lightly for 5-6 times.
- ④ After 30 sec, place the tube on the provided Color Sheet as shown to compare the color.

How to Read the Result

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 indicate the value between them.

Handling of PACKTEST Before and After Use

The content of the tube is **Strong Acid**. Hazardous when contacting with eyes.

First Aid

Eye Contact → Immediately flush eyes with water for at least 15 minutes, followed by consult with Ophthalmologist, even without any symptom.

Skin/Cloth Contact → Immediately flush contacted area with water.

Ingestion → Immediately rinse mouth.

If swallowed 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 may deteriorate in several days especially under the hot and humid weather.

Disposal

For business use, please follow in the manner consistent with relevant laws and regulations. Otherwise, the tube can be disposed as combustible waste.

PACKTEST Iron (Trivalent)

Caution

1. This product allows to measure trivalent iron ion (Fe^{3+}) 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 reaction will be around 1. If the pH of the sample exceeds 1-9, please neutralize with dilute sodium hydroxide solution or dilute sulfuric acid prior to measurement.
3. An iron standard solution of 1000 mg/L develops a color stronger than "100" on the Standard Color. If high concentrations are expected, dilute in advance before measurement.
4. Keep the sample temperature between 15-40°C.
5. Ensure that the PACKTEST tube is filled up to half.
6. Partially undissolved reagent will not affect the measurement.
7. When comparing to the Standard Color, please be sure to read under the daylight. It may be difficult to determine the color under the direct sunlight, certain florescent lights, mercury lamp or LED.
8. You can put the line back into the aperture 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 a color development when adding each of the single substances to the standard solution.

≤1000mg/L	will not affect	... 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.

Reducing substances such as ascorbic acid will reduce Fe^{3+} to Fe^{2+} .