

# Protect Lives and Your Investment With



## ACID BAND & ALKALI BAND



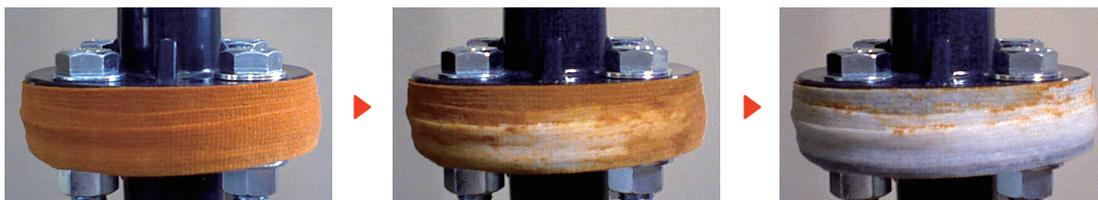
**Durable elastic band for detecting acid and alkali leaks**

### WHY ACID BAND & ALKALI BAND ?

- Stop a leak in its early stage and prevent a hazardous chemical disaster at a low cost.
- Color change when in contact with liquid Acid, Alkali and gas.
- Durable in all weather and UV resistant cloth and pigment.
- Capillary Action in the band enables absorption and detection of leaks from a nonvisible side of pipes and joints.



**Capillary  
Action:**



#### Application:

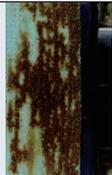
Wrap firmly at least one time plus two to three centimeters around pipes, flanges, valves, etc. and tear it with your fingers. Press firmly to secure the edges. There is no need for scissors or any adhesives. The band can be removed and reapplied several times if necessary. Replaced the band when the color has faded.

**Size : L 10m W 25mm**



<http://www.tanigutiusa.com/>  
E-mail [info@taniguti.co.jp](mailto:info@taniguti.co.jp)

■ MANUFACTURED BY  
TANIGUCHI SHOKAI CO., LTD.

		ACID BAND				ALKALI BAND						
		liquid (aqueous solution)		gas	liquid (aqueous solution)					gas		
<b>changes color in contact with</b>	strong acid (under pH2)		weak acid (over pH2)		sulfur dioxide [SO <sub>2</sub> ]	- hydroxide [□ x (OH) y]	chloric acid (alkaline) [□ Clx Oy]	hydrogen peroxide [H <sub>2</sub> O <sub>2</sub> ] (over 2%)	ethylene amine [NH <sub>2</sub> (CH <sub>2</sub> CH <sub>2</sub> NH)x H]	ammonia [NH <sub>3</sub> ] (over 1%) ammonium [NH <sub>4</sub> □]	ammonia [NH <sub>3</sub> ]	hydrogen sulfide [H <sub>2</sub> S]
	hydrochloric acid [HCl]	sulfic acid [H <sub>2</sub> SO <sub>4</sub> ] nitric acid [HNO <sub>3</sub> ] etc.	hydrofluoric acid [HF] phosphric acid [H <sub>3</sub> PO <sub>4</sub> ] acetic acid [CH <sub>3</sub> COOH] citric acid [C(OH)(CH <sub>2</sub> COOH) <sub>2</sub> COOH] etc.	sodium hydroxide [NaOH] (over 1%) potassium hydroxide [KOH] (over 1%)		sodium hypochlorite [NaClO] (over 3%)	ethylene diamine [NH <sub>2</sub> (CH <sub>2</sub> CH <sub>2</sub> NH) H] (EDA over 2%) diethylene triamine [NH <sub>2</sub> (CH <sub>2</sub> CH <sub>2</sub> NH) <sub>2</sub> H] (DETA over 2%)		ammonium hydrogen carbonate [NH <sub>4</sub> H CO <sub>3</sub> ] (over 10%)			
<b>reaction time</b>	from seconds to several days depending on pH levels and acid density				from seconds to several minutes							
<b>color changes to</b>												
	yellow	white		blue	blue purple (under 10%) black with white spot (over 10%)	black	dark brown	purple with white spot	blue purple with white spot	dark brown		
<b>no color change in contact with</b>	perchloric acid [HClO <sub>4</sub> ], chromic acid anhydride [CrO <sub>3</sub> ] etc.				aniline [C <sub>6</sub> H <sub>5</sub> NH <sub>2</sub> ] diethylamine [(CH <sub>3</sub> CH <sub>2</sub> ) <sub>2</sub> NH] ammonium solution (under pH8) ammonium phosphate [(NH <sub>4</sub> ) <sub>3</sub> PO <sub>4</sub> ] ammonium nitrate [NH <sub>4</sub> NO <sub>3</sub> ] weak alkali : sodium carbonate [Na <sub>2</sub> CO <sub>3</sub> ], sodium hydrogen carbonate [NaHCO <sub>3</sub> ], sodium nitrite [NaNO <sub>2</sub> ] etc.							
<b>absorption ability of liquid</b>	10~16cc/m											
<b>materials</b>	cloth	polyethther										
	pigment	ferrous				coppery						