Protect Lives and Your Investment With

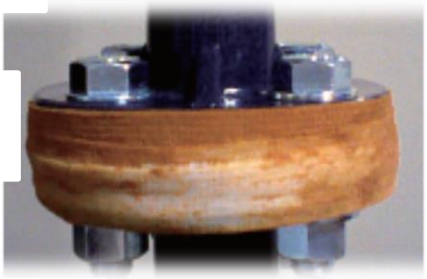
ACID BAND
&
ALKALI BAND

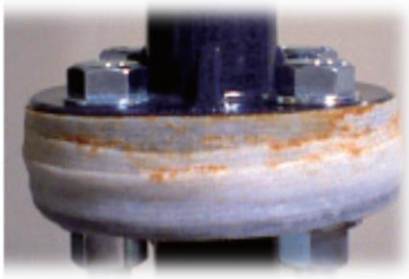
Durable elastic band for detecting acid and alkali leaks

WHY ACID BAND & AKALI 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.

✦MANUFATURED BY
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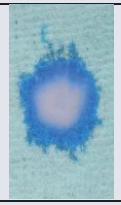
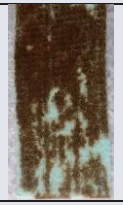
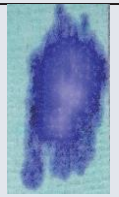
		ACID tape				BASID tape						
		liquid (aqueous solution)			*gas*	*liquid (aqueous solution)*					*gas*	
changes color in contact with		**strong acid** (under pH2)		**weak acid** (over pH2)	**sulfur dioxide** [SO_2]	- **hydroxide** [□x (OH)y]	**chloric acid (alkaline)** [□ Clx Oy]		**ethylene amine** [$NH_2(CH_2CH_2NH)x$ H]	**ammonia** [NH_3] (over 1%) **ammonium** [NH_4 □]		
		hydro-chloric acid [HCl]	**sulfulic acid** [H_2SO_4] **nitric acid** [HNO_3] **etc.**	**hydrofluoric acid** [HF] **phosphoric acid** [H_3PO_4] **acetic acid** [CH_3COOH] **citric acid** [$C(OH)(CH_2COOH)_2COOH$] **etc.**		**sodium hydroxide** [NaOH] (over 1%) **potassium hydroxide** [KOH] (over 1%)	**sodium hypochlo-rite** [NaClO] (over3%)	**hydrogen peroxide** [H_2O_2] (over 2%)	**ethylene diamine** [$NH_2(CH_2CH_2NH)$ H] (EDA over 2%) **diethylene triamine** [$NH_2(CH_2CH_2NH)_2$ H] (DETA over 2%)	**ammonium hydrogen carbonate** [NH_4 H CO_3] (over 10%)	**ammonia** [NH_3]	**hydrogen sulfide** [H_2S]
color changes to	*at edge*	*yellow*	*white*			*blue*	*blue purple ~ black* (over 10%)	*black*	*dark brown*	*purple*	*blue purple*	*dark brown*
	at center						*white* (over 10%)			*white*	*white*	
	photo											
how long it takes to change color		seconds ~ some days (Mainly depends on pH and concentration. Strong or highly concentrated acid reacts rapid.)				seconds ~ a few minutes						
not change color in contact with		perchloric acid [$HClO_4$] chromic acid anhydride [CrO_3] etc.							aniline [$C_6H_5NH_2$] diethylamine [$(CH_3CH_2)_2NH$]	ammonium solution under pH8 : ammonium phosphate [$(NH_4)_3PO_4$] ammonium nitrate [NH_4NO_3]		
		weak alkali : sodium carbonate [Na_2CO_3], sodium hydrogen carbonate [$NaHCO_3$], sodium nitrite [$NaNO_2$] etc.										
absorption ability for liquid		around 15cc/m										
materials	*cloth*	polyester										
	pigment	ferrous				coppery						