

## RAMCO® TFE SPRA-GARD® PRODUCT SPECIFICATION

The RAMCO® TFE SPRA-GARD® Safety Shield is fabricated for use on flanges, valves, threaded connections, welded connections, pumps, flow meters or special applications. It is designed to prevent injury to personnel or damage to adjoining equipment in the event of a spray out or leak at a joint or connection.

### **MATERIALS OF CONSTRUCTION:**

Fabric PTFE-coated fiberglass fabric, tan in color

Tie-down cords PTFE-coated fiberglass, orange in color Thread PTFE -coated fiberglass, beige in color Center reinforcement PTFE-coated fiberglass, brown in color

pH Indication Window **FEP** 



150#, 300#, 600#, 900#, 1500# 1/4" -60" ANSI

DN PN10, PN16, PN25, PN40, PN 64, PN 100 DN6 - DN1500

JIS 10K, 16K, 20K, 30K, 40K, 63K 6A - 1500A

(Other sizes or custom manufacturing may be available – please contact factory.)

## PRESSURE / TEMPERATURE RATING:

-112°F (-80°C) to 450°F (232°C) **Temperature** Maximum Pressure 1650 psi. (114 bar)

#### **DESIGN CONSIDERATIONS**

☐ The TFE SPRA-GARD® Shield shall be constructed of three layers of PTFE-coated fiberglass fabric (10mil thickness per layer) and one layer of reinforcing PTFE-coated fiberglass scrim for strength at stress areas. No holes through the reinforced surface of the shield are permitted. Tie-Down cords shall be 0.125 (3.2mm) minimum diameter. A Velcro® closure shall be added to aid in installation. The TFE SPRA-GARD® Safety Shield shall be of adequate width to extend beyond the flange bolts and tie down to the pipe on either side of the flange face. The TFE SPRA-GARD® Safety Shield shall indicate the presence of an acid or caustic leak by means of a replaceable indicating pH paper in a sleeve.

☐ When subjected to flame, the material of construction should not produce any toxic or corrosive fumes or by-products. The TFE SPRA-GARD® Safety Shield and tie-down cords should be self-extinguishing, non-flammable and non-combustible.

For more information contact:

### **Ramco Manufacturing Company Inc.**

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# **COMMON APPLICATIONS**

INDUSTRY	SERVICE	APPLICATION
PETROCHEMICAL	AMMONIA	COMPRESSORS / AIR SCRUBBERS
	BENZENE	
	CHLORINE	CAUSTIC UNIT / WATER TREATMENT
	PHENOL	
	PROPYLENE	
	SODIUM HYDROXIDE / CAUSTIC SODA	
	SULPHUR DIOXIDE	BOILERS / CRACKING UNIT
	SULFURIC ACID	
	TOLUENE	
POWER GENERATION	AMMONIA	AIR SCRUBBER
	FERRIC CHLORIDE	WATER TREATMENT
	HYDRAZINE	BOILER WATER TREATMENT
	HYDROCHLORIC ACID	WATER TREATMENT
	HYDROGEN PEROXIDE	WASTEWATER TREATMENT
	SODIUM HYDROXIDE / CAUSTIC SODA	WATER TREATMENT
	SODIUM SULFIDE	
	SULFURIC ACID	WATER TREATMENT
	BLACK LIQUOR	BYPRODUCT/FUEL SOURCE
PULP & PAPER	CHLORINE DIOXIDE	WATER TREATMENT / PULP
		BLEACHING
	DTPA (DIETHYLENE TRIAMINE PENTA ACETATE	CHELATION
	EDTA (ETHYLENE DIAMINE ACETIC ACID	CHELATION
	FSA ( FORMAMIDINE SULFURIC ACID)	DEINKING BLEACHING
	HYDROGEN PEROXIDE	BLEACHING
	MAGNESIUM BISULFITE	SULFITE PULPING
	SODIUM ALUMINATE	PH CONTROL
	SODIUM BISULFITE	PULPING
	SODIUM CARBONATE	ALKALINE PULPING
	SODIUM CHLORATE	CHLORINE DIOXIDE GENERATION
	SODIUM HYPO-CHLORITE	BLEACHING
	SODIUM PEROXIDE	BLEACHING
	SODIUM SULFIDE	KRAFT/SULFIDE COOKING
	THIOUREA DIOXIDE	DEINKING BLEACHING
	WHITE LIQUOR	SEPARATION
OIL REFINERY	AMMONIA	COMPRESSORS / AIR SCRUBBERS
	BENZENE	•
	CHLORINE	CAUSTIC UNIT / WATER TREATMENT
	PHENOL	
	PROPYLENE	
	SODIUM HYDROXIDE / CAUSTIC SODA	
	SULPHUR DIOXIDE	BOILERS / CRACKING UNIT
	SULFURIC ACID	"ALKY" (ALKYLATION) UNIT
	TOLUENE	, and the state of



# **COMMON APPLICATIONS**

	SEAL OIL	
	LUBE OIL	TURBINE
MARINE	ANTI-SCALANT	WATER TREATMENT
THE STATE OF THE S	HYDROCHLORIC ACID	WATER TREATMENT
	SODIUM HYDROXIDE / CAUSTIC SODA	WATER TREATMENT
TO 4 1/2D C DT 4 T/O 1/	LOADING / UNLOADING DOCKS	FLANGES / HOSES / VALVES
TRANSPORTATION-	FUEL OIL	FUEL LINES ON FERRIES
TRUCK RAIL		
	HYDRAULIC OILS CHEMICAL BARGES	CRANE LINES ABOVE WATER
BARGES / FERRIES	PIPELINE	PIPING CONNECTIONS ABOVE DECK
	AMMONIA	COMPRESSORS / AIR SCRUBBERS
	BENZENE	
	CHLORINE	CAUSTIC UNIT / WATER TREATMENT
	METHYL ETHYL KETONE- BUTANONE	
SEMI-CONDUCTOR	PHENOL	
	PROPYLENE	
	SODIUM HYDROXIDE / CAUSTIC SODA	
	SULPHUR DIOXIDE	BOILERS / CRACKING UNIT
	SULFURIC ACID	WATER TREATMENT
	TOLUENE	
MINING-	SULFURIC ACID	LEACHING / WATER TREATMENT
PRECIOUS METALS	HYDROCHLORIC ACID	WATER TREATMENT
THEOLOGO METALS	SODIUM HYDROXIDE / CAUSTIC SODA	WATER TREATMENT
	CYANIDE	LEACHING
	CHLORINE	CAUSTIC UNIT / WATER TREATMENT
WATER /	SODIUM HYDROXIDE / CAUSTIC SODA	WATER TREATMENT
WASTEWATER	SULFURIC ACID	WATER TREATMENT
TREATMENT	ANTI-SCALANT	DE-SCALER IN PIPING SYSTEMS
	HYDROCHLORIC ACID	WATER TREATMENT
	CHLORINE	CAUSTIC UNIT / WATER TREATMENT
	SODIUM HYDROXIDE / CAUSTIC SODA	WATER TREATMENT
FOOD AND BEVERAGE	SULFURIC ACID	WATER TREATMENT
	ANTI-SCALANT	DE-SCALER IN PIPING SYSTEMS
	HYDROCHLORIC ACID	WATER TREATMENT
PHARMACEUTICAL	CHLORINE	CAUSTIC UNIT / WATER TREATMENT
	SODIUM HYDROXIDE / CAUSTIC SODA	WATER TREATMENT / PROCESS
	SULFURIC ACID	WATER TREATMENT / PROCESS
	ANTI-SCALANT	DE-SCALER IN PIPING SYSTEMS
	HYDROCHLORIC ACID	WATER TREATMENT / PROCESS
	ACETIC ACID	PROCESS
	FORMIC ACID	PROCESS
	HYDROGEN PEROXIDE	PROCESS
	PHOSPHORIC ACID	PROCESS
	PERCHLORIC ACID	PROCESS
	NITRIC ACID	PROCESS
	LACTIC ACID	PROCESS
	TRIFLUOROACETIC ACID	PROCESS
	AMMONIUM ACETATE	PROCESS