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info@ramco-safetyshields.com

RAMCO® TEFLON (TFE) SPRA-GARD® PRODUCT SPECIFICATIONS

1.0 TECHNICAL REQUIREMENTS

The RAMCO® TFE SPRA-GARD® Safety Shield is fabricated for use on flanges, valves, threaded 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 sprayout or leak at a joint or connection.

- 1.1 Teflon-coated fiberglass is the preferred material- beige or tan in color
- 1.2 The SPRA-GARD® Shield shall be constructed of three layers of Teflon-coated fiberglass fabric (10mil thickness per layer) and one layer of reinforcing teflon-coated fiberglass scrim for strength at stress areas.

No holes through the reinforced surface of the shield are permitted.

Tie-down cords to be made of 100% teflon-coated fiberglass, orange in color, with a diameter no smaller than 0.125 inch.

The Sprra-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.

- 1.3 The Safety Shield to withstand temperatures up to 450°F(232°C) and pressures up to 1650 psi. (114 bar)
- 1.4 The Safety Shield shall indicate the presence of an acid or caustic leak by means of a replaceable indicating pH paper in a teflon sleeve.
- 1.5 When subjected to flame, the material of construction should not produce any toxic or corrosive fumes or by-products. The SPRA-GARD® Safety Shield and tie-down cords should be self-extinguishing, non-flammable and non-combustible.

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RAMCO® TEFLON (TFE) DRAIN-GARD® **PRODUCT SPECIFICATIONS**

1.0 TECHNICAL REQUIREMENTS

The RAMCO® TFE DRAIN-GARD® Safety Shield is fabricated for use on flanges, valves, threaded 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 sprayout or leak at a joint or connection.

- 1.1 Teflon-coated fiberglass is the preferred material- beige or tan in color
- 1.2 The TFE DRAIN-GARD® Shield shall be constructed of three layers of Teflon-coated fiberglass fabric (10mil thickness per layer) and one layer of reinforcing teflon-coated fiberglass scrim for strength at stress areas.

No holes through the reinforced surface of the shield are permitted.

Tie-down cords to be made of 100% teflon-coated fiberglass, orange in color, with a diameter no smaller than 0.125 inch.

The 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.

Teflon drain that is 3/8”(12mm) OD, 5/16”(8mm) ID, 7/8”(20mm) threads exposed.

- 1.3 The Safety Shield to withstand temperatures up to 450°F(232°C) and pressures up to 1650 psi. (114 bar)
- 1.4 The Safety Shield shall indicate the presence of an acid or caustic leak by means of a replaceable indicating pH paper in a teflon sleeve.
- 1.5 When subjected to flame, the material of construction should not produce any toxic or corrosive fumes or by-products. The TFE DRAIN-GARD® Safety Shield and tie-down cords should be self-extinguishing, non-flammable and non-combustible.

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RAMCO® TEFLON (TFE) SPRA-GARD® SPCL PRODUCT SPECIFICATIONS

1.0 TECHNICAL REQUIREMENTS

The RAMCO® TFE SPRA-GARD® SPCL Safety Shield is fabricated for use on flanges, valves, threaded 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 sprayout or leak at a joint or connection.

1.1 Non-Porous Teflon-coated fiberglass is the preferred material- beige or tan in color

1.2 The SPRA-GARD® Shield shall be constructed of to form three layers of Teflon-coated fiberglass fabric (5 mil thickness per layer).

Tie-down cords to be made of Teflon-coated fiberglass, orange in color, with a diameter no smaller than 0.125 inch.

Thread used in the construction of the Safety shield shall be Teflon-Coated fiberglass.

The Sprra-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.

1.3 The Safety Shield to withstand temperatures up to 450°F (232°C) and pressures up to 1500 psi and be chemical, UV, fire and tear resistant.

1.4 The Safety Shield shall indicate the presence of an acid or caustic leak by means of a replaceable indicating pH paper in a Teflon sleeve.

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

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**RAMCO®TEFLON (TFE) SPRA-GARD®
With Exposed Flange Bolts
Product Specification**



TECHNICAL REQUIREMENTS

The Ramco® TFE SPRA-GARD® Safety Shield is fabricated for use on flanges, valves, threaded 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.

1.0 Teflon-coated fiberglass is the preferred material.

1.1 The SPRA-GARD® Shield shall be constructed of three layers of Teflon-coated fiberglass fabric and one layer of reinforcing Teflon-coated fiberglass scrim for strength at stress areas.

No holes through the reinforced surface of the shield are permitted.

Tie-down cords to be made of 100% Teflon-coated fiberglass with a diameter no smaller than 0.125 inch.

The SPRA-GARD® Safety Shield shall be of adequate width to cover the width of the flange with a shortened hem allowing the flange bolts to be exposed.

1.2 The Safety Shield shall withstand temperatures up to 450°F (232°C) and pressures up to 1650 PSI.

1.3 The Safety Shield shall indicate the presence of an acid or caustic leak by means of replaceable indicating paper in a Teflon sleeve.

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

1.5 Available from:

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RAMCO® TEFLON (TFE) SPRA-GARD® w/ PTFE THRD/CORD **PRODUCT SPECIFICATIONS**

1.0 TECHNICAL REQUIREMENTS

The RAMCO® TFE SPRA-GARD® Safety Shield is fabricated for use on flanges, valves, threaded 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 sprayout or leak at a joint or connection.

- 1.1 Teflon-coated fiberglass is the preferred material- beige or tan in color
- 1.2 The SPRA-GARD® Shield shall be constructed of three layers of Teflon-coated fiberglass fabric (10mil thickness per layer) and one layer of reinforcing teflon-coated fiberglass scrim for strength at stress areas.

No holes through the reinforced surface of the shield are permitted.

Tie-down cords to be made of 100% TEFLON, white in color, with a diameter no smaller than 0.125 inch.

Thread for assembly of shield shall be manufactured of 100% TEFLON.

The Spragard® 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.

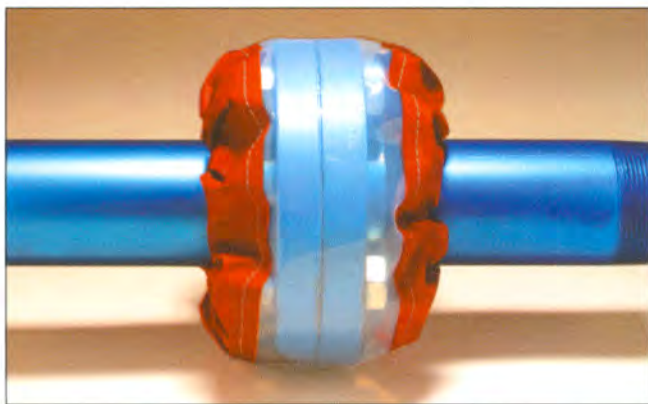
- 1.3 The Safety Shield to withstand temperatures up to 450°F(232°C) and pressures up to 1650 psi. (114 bar)
- 1.4 The Safety Shield shall indicate the presence of an acid or caustic leak by means of a replaceable indicating pH paper in a teflon sleeve.
- 1.5 When subjected to flame, the material of construction should not produce any toxic or corrosive fumes or by-products. The SPRA-GARD® Safety Shield and tie-down cords should be self-extinguishing, non-flammable and non-combustible.

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Constructed of TFE coated fiberglass that is burnt orange in color with a wide center band of clear film (ECTFE), the Vue-Gard® Safety Shield permits visual inspection of pipe joints by personnel so leaks can be detected rapidly.

This unique viewing shield withstands temperatures up to 300°F (150°C) and pressures to 1000 psi (69 bar). It demonstrates a broad spectrum of chemical resistance, especially to most corrosive chemicals and organic solvents.



▲ RAMCO® Vue-Gard® Flange Shield

Similar in construction to the other Spra-Gard® Shields, the Vue-Gard®'s overlap design completely encompasses a flange connection down to the outside diameter of the pipe; thus, containing both frontal and lateral sprayouts in systems carrying hazardous or toxic chemicals, even under high pressure conditions.

Because of its novel characteristics, this "See-Thru" shield demonstrates a wide scope of applications in the chemical processing industries. In addition to chemical and pharmaceutical uses, this shield is appropriate in refineries as well as pulp and paper operations.

An ideal application of the Vue-Gard® Safety Shield is its custom fabrication for use with sight flow indicators. The clear design of the shield allows easy visualization of the sight window and sight window retainers, as well as the pipe connections.

Judged as a major contribution toward more efficient, effective plant operations in the chemical

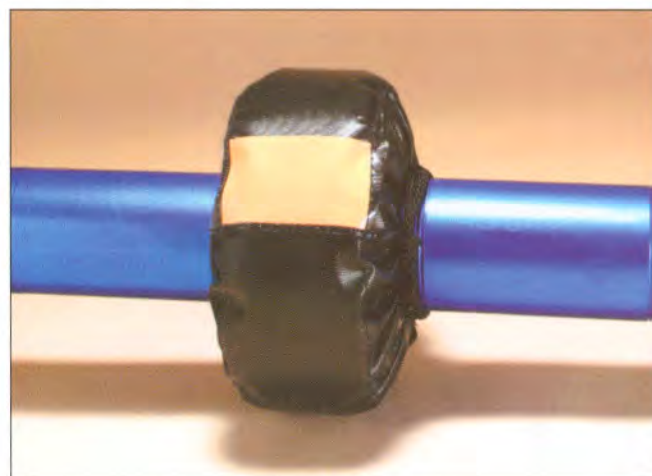
processing industries, the RAMCO® Vue-Gard® Safety Shield was honored with an award by CHEMICAL PROCESSING in Maintenance/Safety.



▲ RAMCO® Vue-Gard® Flow Indicator Shield

PPL SPRA GARD® SAFETY SHIELDS

This shield was developed by RAMCO® for a very specific application. Unlike the TFE Spra-Gard® Shield that contains fiberglass, the PPL shield can be used to protect against hydrofluoric acid, a highly virulent chemical that is used to etch glass and is also employed in petroleum cracking operations. Recognizing that the PPL Spra-Gard® Shield provided the first practical safeguard against this hazardous acid, RAMCO® received the John C. Vaaler Award in 1978.



▲ RAMCO® PPL Spra-Gard® Shield