

MSDS No.: FP-14
 Date: 06/01/1995
 Revisions: 11/02/2001



MATERIAL SAFETY DATA SHEET

SECTION I	GENERAL INFORMATION		
A.	Material Name: <u>Kynar® Plastic Fittings / Valves / Pipe</u>		
	Other Names: <u>Polyvinylidene Fluoride Fittings</u> Chemical Family: <u>Fluorinated Polymer</u>		
B.	Manufacturer: NIBCO INC. 1516 Middlebury St. P.O. Box 1167 Elkhart, IN 46516	Telephone: 219-295-3000 For chemical emergency - spill, leak, fire exposure or accident, call: CHEMTEL 1-800-255-3924 day or night	

SECTION II Composition / Information on Ingredients				
Ingredient	CAS #	Weight %	ACGIH TLV	OSHA PEL
polyvinylidene fluoride	24937-79-9	99.9+	none established	none established

KNOWN HAZARDS UNDER 29 CFR 1910.1200											
	Yes	No		Yes	No		Yes	No		Yes	No
Combustible Liquid		x	Skin Hazard		x	Oxidizer		x	Reproductive Toxin		x
Flammable Material		x	Eye Hazard		x	Organic Peroxide		x	Blood Toxin		x
Pyrophoric Material		x	Toxic Agent		x	Corrosive Material		x	Nervous Sys. Toxin		x
Explosive Material		x	Highly Toxic Agent		x	Compressed Gas		x	Lung Toxin		x
Unstable Material		x	Sensitizer		x	Irritant		x	Liver Toxin		x
Water Reactive Mat.		x	Carcinogen		x				Kidney Toxin		x

Comments: <0.1% pigment added to base PVDF material for colors; not reportable under 1910.1200

SECTION II		Composition / Information on Ingredients (CONTINUED)		
SHIPPING INFORMATION		SPECIAL HAZARD DESIGNATIONS		
DOT HAZARD CLASS: NA		HMIS	NFPA	HAZARD RATING
DOT SHIPPING NAME:	HEALTH:	0	0	0 - MINIMAL
Synthetic Resin, flakes, powders	FLAMMABILITY:	0	0	1 - SLIGHT
	REACTIVITY:	0	0	2 - MODERATE
	PROTECTIVE EQUIPMENT:			3 - SERIOUS
SHIPPING I.D. NUMBER: 156200				4 - SEVERE

SECTION III		PHYSICAL DATA	
Melting Point: 320 - 338 °F		Vapor Pressure (mm Hg): N/A	
Boiling Point: N/A		Vapor Density (AIR=1): N/A	
Specific Gravity (H ₂ O=1): 1.78		Solubility in Water: insoluble	
Appearance and Odor: odorless clear pellets			

SECTION IV		FIRE AND EXPLOSION HAZARD DATA	
Flash Point (method used): N/A			
LEL: N/A		UEL: N/A	
Extinguishing Media: does not support combustion			
Special Fire fighting Procedures: In the event of fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus with full face piece, operated in the positive pressure mode			
Unusual Fire and Explosion Hazards: Irritating and/or toxic gases due to decomposition of the product may be generated during a fire. Thermal decomposition begins to generate hydrogen fluoride, which is corrosive and causes skin and eye burns on contact, at 600 °F and evolution becomes rapid at 700 °F.			

SECTION V		REACTIVITY DATA	
A. Stability:	<input checked="" type="checkbox"/> Stable	<input type="checkbox"/> Unstable	
Conditions to Avoid:	heating above 572 °F		
B. Hazardous Polymerization:	<input type="checkbox"/> May Occur	<input checked="" type="checkbox"/> Will Not Occur	
Conditions to Avoid:			
C. Incompatible Materials:	Strong bases and strong alkalis.		
D. Hazardous Decomposition Products:	hydrogen fluoride, carbon monoxide, carbon dioxide.		

SECTION VI**HEALTH HAZARD DATA**

Route(s) of Entry: Inhalation Ingestion Skin

Health Hazards (Acute and Chronic):

A. **Metals:**

B. **Other Constituents:**

Polyvinylidene Chloride Polymer: It is reasonable to anticipate that ingestion of dust would be irritating to the gastro-intestinal tract. Dusts or vapors may be irritating to the respiratory tract and cause coughing or sneezing. No chronic exposure effects are known. As with any organic compound that is heated to vaporization, exposure may aggravate pre-existing conditions such as colds, allergies, asthma emphysema and psoriasis.

C. **Carcinogenicity:** NTP IARC OSHA

None of the constituents show carcinogenicity.

D. **Emergency First Aid:**

Not applicable to finished fittings.

SECTION VII**SPILL OR LEAK PROCEDURES****A. Special Handling or Storage:**

Keep dry and away from strong bases and alkalis. Avoid dispersion of dust into the air. Maintain good housekeeping standards to prevent the accumulation of dust.

B. Spill or Leak Containment:

For spills of broken fittings, sweep from floor for stable footing and to prevent slips by personnel.

C. Waste Disposal:

Dispose of waste in a licensed landfill or incinerate in accordance with federal, state and local regulations.

D. Other Precautions:

None

SECTION VIII**SPECIAL PROTECTION INFORMATION**

A. Respiratory Protection (specify type): NIOSH approved dust/fume/acid gas or organic cartridge respirator, as appropriate

B. Ventilation: Local Exhaust Mechanical (General)

Other (specify): _____

C. Eye Protection: Yes No Type: glasses or goggles *

D. Protective Gloves: Yes No Type: Thermally insulating *

E. Other Protective Equipment or Clothing: Yes No

Type: N/A

F. Special Precautions or Work Practices: None

DISCLAIMER OF LIABILITY

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The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

PRODUCT NAME

Kynar Plastic Fittings / Valves / Pipe

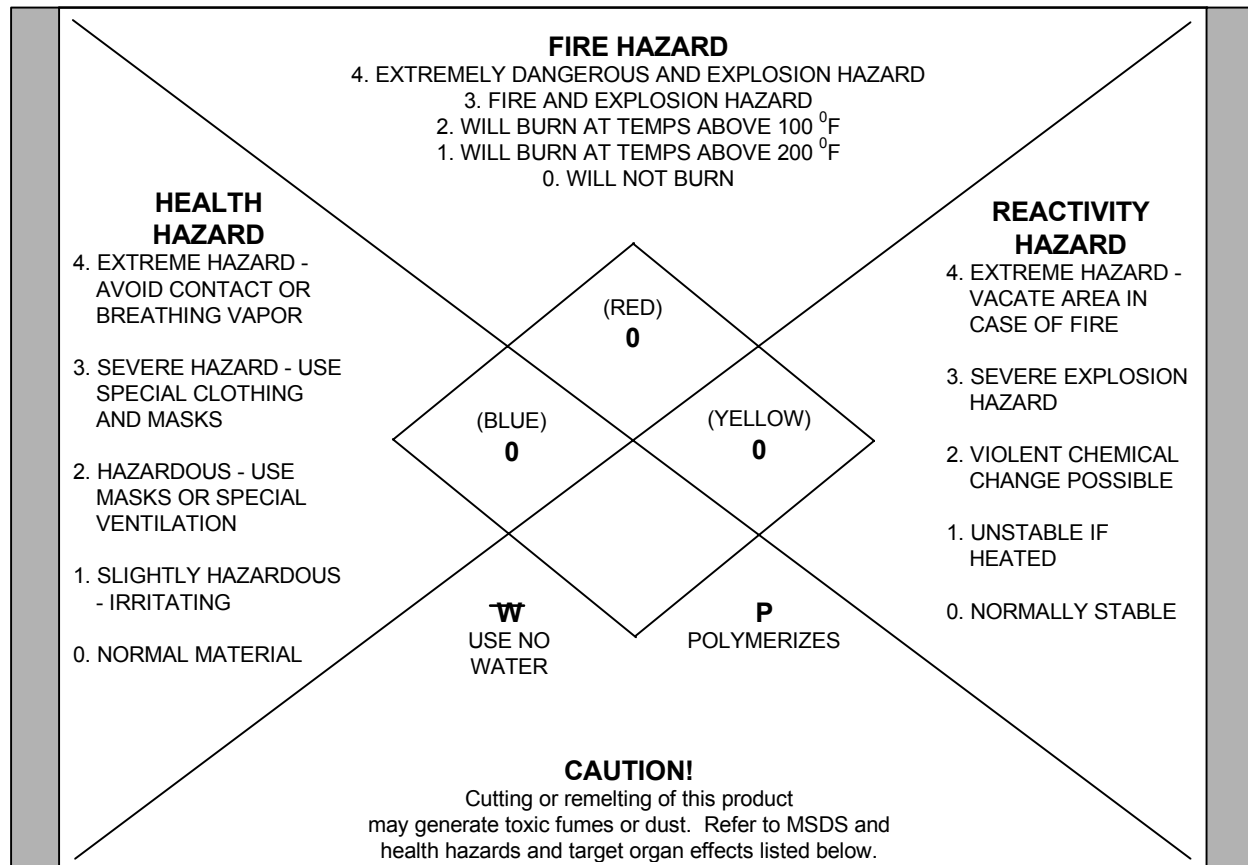
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Refer to Material Safety Data Sheet for more information



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 1516 Middlebury St.
 P.O. BOX 1167
 ELKHART, IN 46516
 219-295-3000

NFPA RATING AS SHIPPED

<p style="text-align: center;">INGREDIENTS</p> <p>Polyvinylidene Floride</p>	<p style="text-align: center;">STORAGE AND HANDLING</p> <p>Store away from excessive heat and open flame</p>
<p style="text-align: center;">SARA SECT. 313 NOTIFICATION</p>	

<input type="checkbox"/> TOXIC <input type="checkbox"/> HIGHLY TOXIC <input type="checkbox"/> REPRODUCTIVE TOXIC	<p style="text-align: center;">HEALTH HAZARDS</p> <input type="checkbox"/> IRRITANT <input type="checkbox"/> CORROSIVE <input type="checkbox"/> SENSITIZER	<input type="checkbox"/> CARCINOGEN <input type="checkbox"/> _____ <input checked="" type="checkbox"/> NO KNOWN EFFECTS
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<p>IMMEDIATE AND DELAYED HEALTH EFFECTS</p>		
<input type="checkbox"/> HEPATOXINS (LIVER DAMAGE) - jaundice, liver enlargement <input type="checkbox"/> NEPHROTOXINS (KIDNEY DAMAGE) - edema, proteinuria <input type="checkbox"/> NEUROTOXINS (NERVOUS SYSTEM DAMAGE) - narcosis, behavioral changes, decrease in motor functions	<input type="checkbox"/> HEMATOPOIETICS (BLOOD DAMAGE) - cyanosis, unconsciousness <input type="checkbox"/> PULMONARY DYSFUNCTIONS (Lung Damage) - shortness of breath, chest tightness, cough <input type="checkbox"/> REPRODUCTIVE TOXINS - birth defects, sterility	<input type="checkbox"/> CUTANEOUS HAZARDS - skin damage, rashes, irritation, defatting of skin <input type="checkbox"/> EYE HAZARDS - impaired vision, conjunctivitis, corneal damage <input checked="" type="checkbox"/> NONE - no known immediate or delayed effects