THERMOPLASTICS AND ELASTOMERS

ABS — ACRYLONITRILE - BUTADIENE - STYRENE - Class 4-2-2 conforming to ASTM D-1788. Temperature range from -40 degrees F to 180 degrees F. Excellent resistance to deposit formation. Superior resistance to sewage and common chemical formulations. Good impact resistance (many automotive parts, bumpers and panels). ABS can be joined by cementing, threading and flanging.

PVC — POLYVINYL CHLORIDE - Class 12454-B Type 1, Grade 1 to ASTM 1784. Temperature range from -30 degrees F to 140 degrees F. PVC is the most common and most widely used thermoplastic material. It resists most acids, strong Alkalis, salts and paraffinic hydrocarbon solutions. Excellent for industrial chemical and plating systems, deionized water, irrigation and drainage systems. PVC is not recommended for use with chlorinated or aromatic hydrocarbons, esters or polar solvents such as ketones. The material can be joined by cementing, threading or flanging.

CPVC — CHLORINATED POLYVINYL CHLORIDE - Class 23447-B Type IV Grade 1 to ASTM D-1784. The physical properties at 73 degrees F are very similar to PVC. CPVC has a slightly better chemical resistance and has a higher temperature range to 210 degrees F. It is not recommended for use with chlorinated or aromatic hydrocarbons, esters or polar solvents such as ketones. The material can be joined by cementing, threading or flanging.

PP — POLYPROPYLENE - Type 1 to ASTM D-4101 class PP10-B67154. Temperature range from -30° F (degrees F) to maximum 180°F (degrees F) but at this temperature we recommend it's use only with water or drainage. PP is the lightest of all plastics. Resistant to organic solvents, acids and alkalies. It is not recommended for oxidizing acids, chlorinated hydrocarbons or aromatics. Mostly used for sulfur-bearing materials, saltwater solutions, crude oil and low pressure gas systems. PP can be joined by thermo-seal fusion, threading or flanging.

PVDF — POLYVINYLIDENE FLUORIDE - ASTM D-3222 having a temperature range of -80 degrees F to 280 degrees F. The strongest, heaviest and most abrasion resistant of the thermoplastic materials. PVDF is resistant to most acids, bases and organic solvents and is the only thermoplastic resistant to wet or dry chlorine, bromine and other halogens. PVDF can be joined by thermo-seal fusion, threading or flanging.

EPDM — A terpolymer elastomer made from ethylene-propylene diene monomer. Recommended for water, chlorinated water, dilute acids, alkalines, alcohols and ozone. Not recommended for petroleum oils, strong acids and alkalines. EPDM has a temperature range from -20 degrees F to 230 degrees F.