

Bulletin No. PA-1

April, 2006

In order to recommend the proper type of Cresline Plastic Pipe, you need to know three things:

1. What fluid?
2. At what pressure?
3. At what temperature?

What Fluid?

All Cresline pipe except Spartan, PVC & ABS-DWV Cellular Core, DS and Sewer pipe is approved for drinking water use by the National Sanitation Foundation so you have no problem when any type of cold water transmission is involved. However, when chemicals are involved, you need to consult the Chemical Resistance Chart (Bulletin No. T-4) to make a proper recommendation. All types of Cresline Plastic Pipe are highly resistant to a wide variety of corrosive chemicals, but some types are better than others. As a further help, typical applications are listed with each type of pipe in this Guide.

NOTE: DO NOT USE PLASTIC PIPE AND FITTINGS FOR COMPRESSED AIR SYSTEMS.

At What Pressure?

A pressure rating is given for all types and sizes of Cresline pipe except PVC & ABS-DWV Cellular Core, DS and Sewer where pressure generally is not a problem. The pressure rating for each pipe is figured at the industry standard of 73.4° F (about 13° warmer than most drinking water). Cresline pipe has the pressure rating marked right on the pipe. Ratings are listed for each Cresline pipe in this Guide.

At What Temperature?

Pressure ratings go down as temperatures go up. NT 80 pipe, for instance, is pressure-rated at 80 PSI at 73.4° F. It drops to 66 PSI at 90° F, and to 56 PSI at 100° F. Conversely, pressure may be increased to 94 PSI at 60° F and to 106 PSI at 50° F. The maximum recommended temperature for polyethylene and PVC pipe is 140° F and 130° F respectively.

The pressure ratings for each pipe are figured at 73.4° F. Pressure ratings for transmitting warmer or cooler liquids can be found on the product specification sheets under the table entitled "Conversion Chart For Pressure Ratings at Various Temperatures."

Also keep in mind whether the pipe will be subjected to exterior heat as from the sun or other heat sources and figure maximum allowable pressures accordingly.

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HOW TO USE THIS GUIDE

You can recommend a specific Cresline pipe after you have answers to the three basic questions: What fluid? At what pressure? At what temperature?

There are 8 basic types with a total of 16 variations to choose from:

1. Cresline Flexible Plastic Pipe
Cresline NT
Cresline HD
Cresline CE
Spartan
2. Cresline PVC Pressure Pipe
SDR-26
SDR-21
Schedule 40
Schedule 80
3. Cresline Drain, Waste and Vent Pipe (DWV)
PVC-DWV SCH 40 Solid Wall
PVC-DWV Cellular Core
ABS-DWV Cellular Core
4. Cresline PVC Drain and Sewer Pipe (DS)
5. Cresline PVC Sewer Pipe
6. Cresline PVC Sewer Cellular Core Pipe
7. Cresline CPVC Hot and Cold Pipe (HC)
8. Cresline Well Pipe and Casing

Under each pipe heading you will find the following material to help you:

Resin
General Characteristics
Pressure Rating @ 73.4° F

Available Sizes
Standard Met or Exceeded
Typical Applications

This information will also help you when facing a customer who claims he can get "the same pipe cheaper." You will be able to prove that Cresline prices are competitive for pipe made of the same resin, same pressure rating, and to the same standards as the "other brand."

Finally, you will find a Chemical Resistance Chart (Bulletin No. T-4) listing some 500 chemicals alphabetically and the resistance of each type of Cresline pipe to them. This will be most helpful in recommending pipe for industrial use.

CRESLINE NT

Resin: Polyethylene PE 2406 (medium density).

General Characteristics: Best of the polyethylene flexible pipes. It is stronger and has a longer life expectancy than other flexible pipe of the same pressure rating.

NT 160

Pressure Rating Per Sq. Inch @ 73.4° F: 160 PSI

Available Sizes: ¾", 1", 1¼".

NT 100

Pressure Rating Per Sq. Inch @ 73.4° F: 100 PSI

Available Sizes: ½", ¾", 1", 1¼", 1½", 2".

NT 80

Pressure Rating Per Sq. Inch @ 73.4° F: 80 PSI

Available Sizes: ¾", 1", 1¼", 1½", 2".

Meets or Exceeds Following Standards: ASTM D-2239. NSF approval for drinking water use.

Typical Applications:	farm and ranch water systems	sprinkler systems
	electrical and cable TV conduit	irrigation
	construction and excavations	skating rinks
	water service lines	air conditioning
	mine and industrial drainage	submersible pumps

CRESLINE HD

Resin: Polyethylene PE 3408 (High Density).

General Characteristics: Lighter in weight than medium density pipe because less material is required to produce equal working pressure.

HD 200 (AWWA C-901)

Pressure Rating Per Sq. Inch @ 73.4° F: 200 PSI

Available Sizes: ¾", 1", 1¼", 1½", 2".

HD 160

Pressure Rating Per Sq. Inch @ 73.4° F: 160 PSI

Available Sizes: ¾", 1", 1¼", 1½", 2".

HD 125

Pressure Rating Per Sq. Inch @ 73.4° F: 125 PSI

Available Sizes: ½", ¾", 1", 1¼".

HD 100

Pressure Rating Per Sq. Inch @ 73.4° F: 100 PSI

Available Sizes: ¾", 1", 1¼", 1½", 2".

HD 80

Pressure Rating Per Sq. Inch @ 73.4° F: 80 PSI

Available Sizes: 1", 1¼", 1½", 2".

HD-CTS (AWWA C-901)

Pressure Rating Per Sq. Inch @ 73.4° F: 200 PSI

Available Sizes: ¾", 1", 1¼", 1½", 2".

Meets or Exceeds Following Standards: ASTM D-2239 and ASTM D-2737. NSF approval for drinking water use.

Typical Applications:

farm and ranch water systems
electrical and cable TV conduit
construction and excavations
municipal service lines
mine and industrial drainage

sprinkler systems
irrigation
skating rinks
air conditioning
submersible pumps

CRESLINE HD CE BLUE™

Resin: Polyethylene PE 3408 (High Density).

General Characteristics: Lighter in weight than medium density pipe because less material is required to produce equal working pressure. Clear inner skin. Blue outer skin.

CE BLUE 200 (AWWA C-901)

Pressure Rating Per Sq. Inch @ 73.4° F: 200 PSI

Available Sizes: ¾", 1", 1¼", 1½", 2".

CE BLUE 160

Pressure Rating Per Sq. Inch @ 73.4° F: 160 PSI

Available Sizes: ¾", 1", 1¼".

CE BLUE CTS (AWWA C-901)

Pressure Rating Per Sq. Inch @ 73.4° F: 200 PSI

Available Sizes: 3/4", 1", 1 1/4", 1 1/2", 2".

CE BLUE 125/100

Pressure Rating Per Sq. Inch @ 73.4° F: 125/100 PSI

Available Sizes: 1/2", 3/4", 1", 1 1/4", 1 1/2", 2".

CE BLUE 80 IRRIGATION PIPE

Pressure Rating Per Sq. Inch @ 73.4° F: 80 PSI

Available Sizes: 1", 1 1/4".

Meets or Exceeds Following Standards: ASTM D-2239 and ASTM D-2737. NSF approval for drinking water use.

<p>Typical Applications:</p> <ul style="list-style-type: none"> farm and ranch water systems electrical and cable TV conduit construction and excavations municipal service lines mine and industrial drainage 	<ul style="list-style-type: none"> sprinkler systems irrigation skating rinks air conditioning submersible pumps
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CRESLINE PVC PRESSURE PIPE

Resin: PVC 1120 (Polyvinyl Chloride).

General Characteristics: Rigid. Good impact strength. May be used for drinking water and is NSF approved. It has a variety of uses where corrosion is a problem.

SDR-26

Pressure Rating Per Sq. Inch @ 73.4° F: 160 PSI

Available Sizes: 1 1/4", 1 1/2", 2", 2 1/2", 3", 4", 6", 8". Solvent Weld and Gasket Joint.

Meets or Exceeds Following Standards: ASTM D-2241. NSF approval for drinking water use.

SDR-21

Pressure Rating Per Sq. Inch @ 73.4° F: 200 PSI (*SDR-13.5 315 PSI).

Available Sizes: 1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2", 3", 4", 6", 8". Solvent Weld and Gasket Joint.

Meets or Exceeds Following Standards: ASTM D-2241. NSF approval for drinking water use.

Schedule 40

Pressure Rating Per Sq. Inch @ 73.4° F: 130 PSI to 600 PSI, depending on size of pipe. (See Specification Sheet 761 LW and HW).

Available Sizes: 1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2", 3", 4", 6", 8", 10", 12".

Meets or Exceeds Following Standards: ASTM D-1785 NSF approval for drinking water use.

Schedule 80

Pressure Rating Per Sq. Inch @ 73.4° F: 250 PSI to 850 PSI, depending on size of pipe. (See Specification Sheet 761 LW and HW).

Available Sizes: 1/2", 3/4", 1", 1 1/4", 1 1/2", 2", 2 1/2", 3", 4", 6", 8".

Meets or Exceeds Following Standards: ASTM D-1785 NSF approval for drinking water use.

<p>Typical Applications:</p> <ul style="list-style-type: none"> submersible pumps jet pumps water service lines farm and ranch water systems construction and excavations industrial application 	<ul style="list-style-type: none"> irrigation electrical conduit swimming pools sprinkler systems well pipe and casing municipal water systems
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CRESLINE PVC-DWV and CELLULAR CORE

Resin: PVC 1120 (Polyvinyl Chloride).

General characteristics: Rigid. High chemical resistance. Self extinguishing, will not support combustion. Reduces installation and maintenance costs. Available in SCH 40 solid wall and cellular core.

Available Sizes: 1¼", 1½", 2", 3", 4", 6", 8", 10", 12".

Meets or Exceeds Following Standards: NSF DWV approval, FHA No. UM 49, ASTM D-2665, ASTM D-1785 Dual Marked and ASTM F-891 Cellular Core.

Typical Applications:

Interior drainage systems in:	
prefabricated homes	mobile homes
new homes	commercial buildings
home remodeling	apartments

CRESLINE ABS-DWV CELLULAR CORE

Resin: ABS Type 1, Grade 2 (Acrylonitrile Butadiene Styrene).

General Characteristics: Rigid. High impact strength. Extremely resistant to corrosive liquids, combines lightness with toughness. Reduces installation cost and maintenance cost.

Available Sizes: 1½", 2", 3", 4".

Meets or Exceeds Following Standards: NSF DWV approval, FHA No. UM 49 and 54, ASTM F-628.

Typical Applications:

Interior drainage systems in:	
prefabricated homes	mobile homes
new homes	apartments
home remodeling	

CRESLINE PVC DRAIN & SEWER PIPE (DS)

Resin: PVC 1120 (Polyvinyl Chloride).

General Characteristics: Tough, durable, strong. Root-, moisture-, corrosion-proof.

Available Sizes: 3", 4", 6". Solid and Perforated.

Meets or Exceeds Following Standards: ASTM D-2729.

Typical Applications:

- building sewers and underground building drains for home and industry**
- building storm sewers for home and industry**
- disposal fields for septic tank drains and leaching systems**
- subsoil drains for lowland and surface water drainage**

CRESLINE PVC SEWER PIPE AND CELLULAR CORE

Resin: PVC 1120 (Polyvinyl Chloride).

Cell Classification: 12454-B

General Characteristics: Rigid. Extremely resistant to corrosive liquids. Reduces installation and maintenance costs. Available in solid wall and cellular core.

Available Sizes: 4", 6", 8", 10", 12", 15". Solvent Weld and Gasket Joint. Perforated available upon request.

Meets or Exceeds Following Standards: Solid Wall-ASTM D-3034 and Cellular Core-ASTM F-891.

Typical Applications:

- sewer mains**
- sewer service**

CRESLINE HC PIPE (HOT AND COLD)



Resin: CPVC 4120 (Chlorinated Polyvinyl Chloride).

General Characteristics: Rigid. Non-Corrosive. Lightweight. Excellent insulation properties. High water temperature resistance.

Pressure rating Per Sq. Inch: 100 PSI @ 180° F

Available Sizes: ½", ¾", 1", 1¼", 1½", 2".

Meets or Exceeds: ASTM D-2846. NSF approval for drinking water use.

Typical Applications: Hot and cold water service lines.

CRESLINE PVC WATER WELL PIPE AND CASING

Resin: PVC 1120 (Polyvinyl Chloride).

General Characteristics: Rigid. Good impact strength. NSF approved for drinking water. It has a variety of pump uses where corrosion, cost and weight are factors.

PVC Sch 80 Threaded Well Pipe.

Pressure Rating Per Sq. Inch @ 73.4° F: 200 to 315 PSI depending on size of pipe. (See 761 PC Specification Sheet).

Available Sizes: 1", 1¼", 1½", 2". Threaded ends are chamfered for ease of installation. Shipped with protective caps on pipe to prevent thread damage. Threaded and coupled available.

Meets or Exceeds Following Standards: ASTM D-1785. NSF approval for drinking water.

Typical Applications: submersible pumps
 jet pumps
 pressure systems

PVC Water Well Casing

Available Sizes: 2", 4", 4½", 5", 6", 8", 10", 12", 6¼" I.D.

Available Ratings: SDR 26, SDR 21, SDR 17, SCH 40, DR 27.6.

Meets or Exceeds Following Standards: ASTM F-480. NSF approval for drinking water.

Features: 20' hanging lengths (except 2"). Belled end. Chamfered on spigot end with insertion depth ring and deep bell.

Typical Applications: well casing
 well liners
 pressure systems
 irrigation