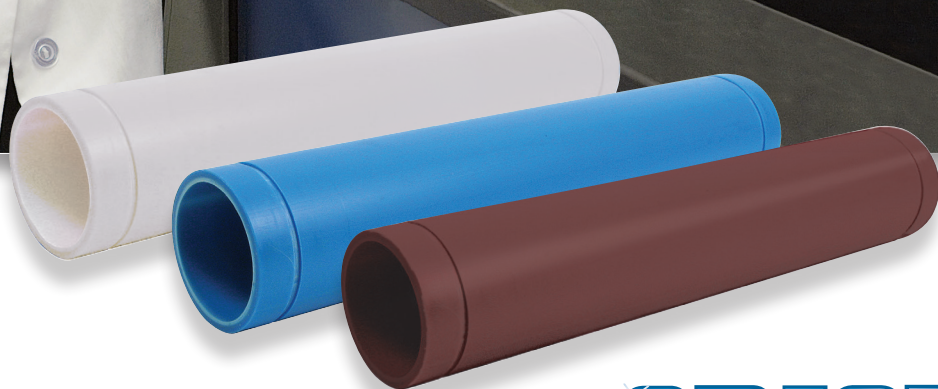


# Chemical Drainage Systems

Plenum Plus™ | Blueline® | Brownline™



[ORIONFittings.com](http://ORIONFittings.com)

**ORION**®

A **WATTS** Brand

# Complete Solution for Chemical Drainage

From laboratory ↓

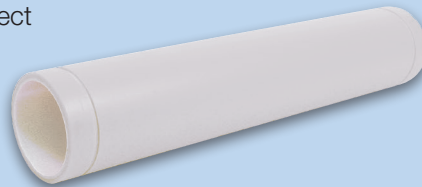
## 1 In Return Air Plenums

### Orion Plenum Plus PVDF

(polyvinylidene fluoride)

- UL-certified to ASTM E84/UL 723 for <25/50 flame spread and smoke values. **(PVDF acid waste systems are the ONLY plastic acid waste piping systems that meet US standards requirements of ASTM E84 and testing requirements of UL 723 without additional insulation and wrapping.)**
- Does not burn. No need to wrap or protect exposed material.

Plenum Plus PVDF



## 2 In the Laboratory

### Orion Blueline FRPP

(flame-retardant polypropylene)

- Pipe and fittings certified to UPC and CAN/CSA B181.3 requirements.
- Easy transition to Plenum Plus PVDF for return air plenums.

Blueline FRPP



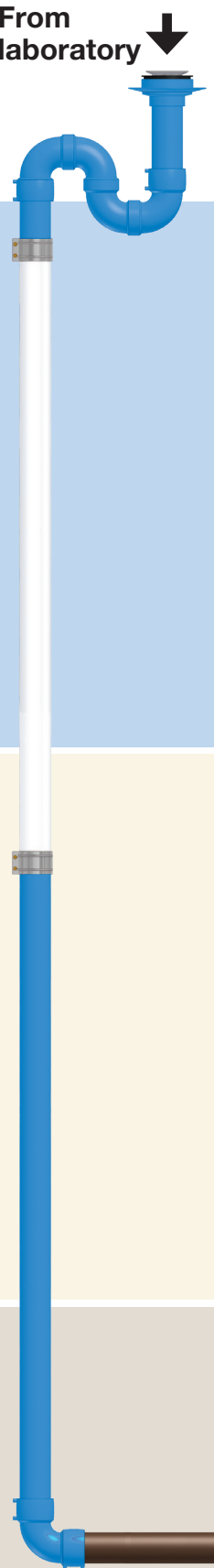
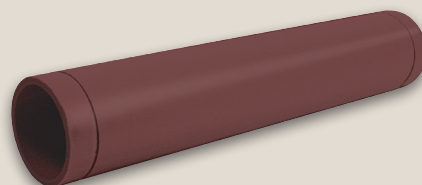
## 3 Underground

### Orion Brownline PP

(non-flame-retardant polypropylene)

- Realize cost savings using the economical non-flame-retardant Brownline PP pipe underground.
- Use with Blueline fittings.

Brownline PP



## Three Joining Methods

Orion provides three joining methods — No-Hub, Electrofusion, and Socket Fusion for use with three types of chemically resistant pipe. All three types are easy to install.

### No-Hub Mechanical Joint

The No-Hub acid waste mechanical joint drainage system is economical and easy to install.

- Fast and easy installation
- All fittings pre-grooved at factory
- Requires no heat or hot water
- Easily assembled with ordinary hand tools
- Easy to clean and maintain
- Stainless steel outer coupling
- No metal in joint
- Suitable for below ground applications



### Electrofusion

The Rionfuse® CF clamp-free electrofusion joining system provides unsurpassed ease of installation and joint strength for acid waste drainage piping. Its electrofusion coil is made of heavy gauge wire molded into the coupling.

- Requires no clamps
- Removable pipe stop allows coupling to be used as a slider for tight installations
- Multiple jointing capabilities and both sides of couplings fuse at the same time
- Positive joints made in just a few minutes
- Uses same plain end fittings as Orion No-Hub system
- Easily assembled with Rionfuser® electrofusion machine
- Can be used with polypropylene and PVDF to provide excellent resistance to a wide variety of chemicals and acids
- Available in 1½" - 12" sizes



### Socket Fusion

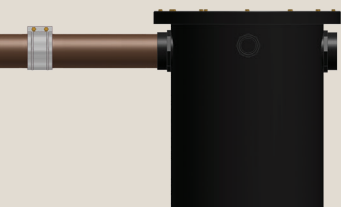
Socket fusion type pipe and fittings for use with acid waste are joined by heat fusing the polypropylene or polyvinylidene fluoride material with an Orion thermostatically controlled heat tool. In a semi-molten state, pipe and fittings are easily joined to form a strong, permanent sealed joint.

- No metal in joint
- Suitable for below-ground applications



### Joining Selection Guide

Application	NO HUB	RIONFUSE CF	SOCKET FUSION
Underground	√	√	√
Aboveground	√	√	√
Very Aggressive Chemicals (need tamperproofing)		√	√
Joint			
Re-configurable	√		
Permanent Joint		√	√
Cost			
Lower Upfront Material Cost/Higher Install Cost			√
Higher Upfront Material Cost/Lower Install Cost		√	



# Monitoring/Dosing Systems

## Neutralization Tanks

These tanks are used to receive, dilute and neutralize the pH of corrosive and harmful chemical wastes.

- Manufactured by rotationally molding virgin resins to uniform wall thicknesses
- All penetrations are thermally fused to tanks and leak tested before shipping
- Stress and defect free
- Lightweight and easy to install
- Designed to individual customer specifications, with fast delivery direct from factory
- Able to accommodate 1 to 1200 gallons

**T8 POU Tank**



**T5 Neutralization Tank**



## Monitoring/Dosing Systems

Orion monitoring systems are used to protect sewer systems and the environment.

- Monitors/records pH data; signals dosing pumps
- Allow local and remote (via a LAN) data retrieval
- Can be connected to building maintenance systems

**NGIII Monitor & Probe**



**SLS-300 Neutralization System**



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