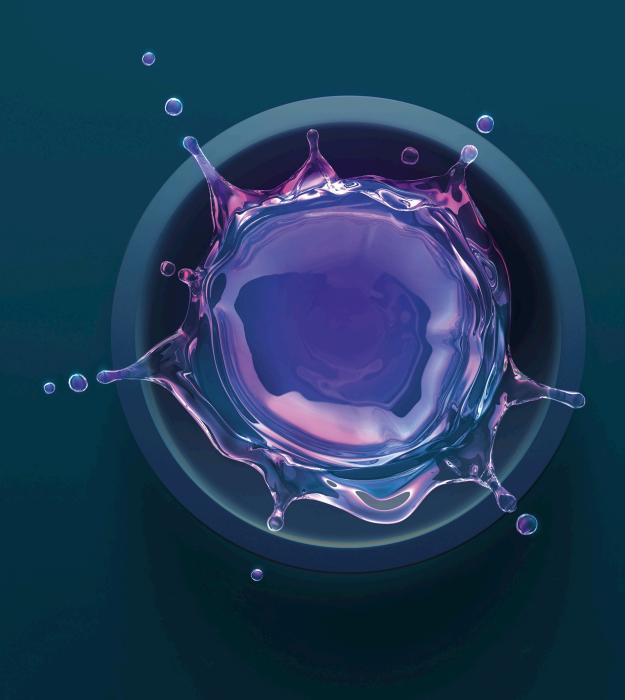


## Elementary protection

**FUSEAL® Corrosive Waste Piping System** 



### A complete system ready for every application

### Excellent corrosion, chemical, and environment resistance

FUSEAL® is resistant to the corrosive action of alkalis, alcohols, acids, solvents and salt solutions. Dilute mineral acids and aqueous solutions of acid salts (which are destructive to most metals), have no effect on the FUSEAL® system. FUSEAL® will not rust, pit, scale, corrode or be effected by electrolysis.

With excellent chemical resistance and physical properties, FUSEAL® is the ideal system for handling corrosive waste mixtures of acids, bases and solvents present in laboratories, industrial and food & beverage processing applications.

In above ground installations, the pigmentation protects the system from sunlight. This pigmentation is highly resistant to ultraviolet radiation and is heat stabilised to provide long life while handling hot reagents.

### High temperature rating

FUSEAL® handles corrosive drainage fluids up to 100°C intermittently, with continuous service up to 82°C.

### **Applications**

Excellent chemical and physical properties make the FUSEAL® system ideal for handling corrosive chemical waste solutions present in laboratory and industrial applications. FUSEAL® is suitable for use in chemical and industrial plants as well as in food and beverage, hospital, schools and university laboratories. Essentially, it could be anywhere that mixtures of acids, bases and solvents are drained. FUSEAL® is a common solution when many metallic waste systems fail due to corrosion.

### Material

- · Flame retardant polypropylene.
- · Non-flame retardant polypropylene.

### **Pressure rating**

- Fast-Lock™ 2.5 Bar
- · Electrofusion 3.4 Bar

### Temperature rating

- Constant temperature: 0°C 82°C
- Intermittent temperature: Up to 100°C

### **Standards**

- All fittings are flame retardant with UL-94 rating of V-2, and ASTM D635 rating of HB
- Compliant against ASTM F1412, ASTM D4101 and ASTM D635
- Capable of being installed in accordance with EN12056 and EN1852-1





### FUSEAL® benefits

- · Low installation cost with maintenance-free service
- · Excellent chemical and corrosion resistance
- Flame retardant PP 38mm to 152mm as standard
- Both non-flame and flame retardant PP options 203mm to 457mm
- High temperature, intermittent discharges up to 100°C, continuous up to 82°C
- Electrofusion and mechanical jointing technologies
- · Lightweight, easy to use welding machine
- · Full system solution
- · Off-site fabrications
- · Dual containment option

### Fields of application

- · Corrosive waste drainage
- Education
- Chemical process
- Food and beverage
- Utilities
- Health
- · Power generation
- Pharmaceutical
- Industrial

### **Product range**

Fittings	Size	Material	Connection
FUSEAL®	38mm to 152mm	Flame retardant polypropylene	New electrofusion locking collar
FUSEAL® Fast-Lock™	38mm to 102mm	Flame retardant polypropylene	Mechanical joint
FUSEAL®	203mm to 356mm	Flame and non-flame retardant polypropylene	Electrofusion
	406mm to 457mm		Butt fusion

### **Product range (dual containment)**

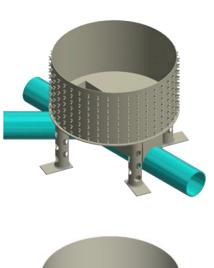
Pipes	Size	Material
Dual Containment	38mm to 152mm	Flame retardant polypropylene V-2
	203mm to 457mm	Non-flame retardant polypropylene

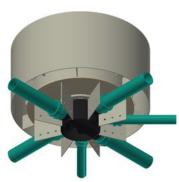


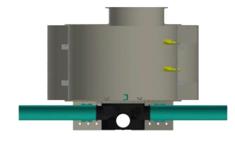


### For the unique requirements of the UK market.

Larger sizes & bespoke solutions manufactured in the UK by CPV Ltd  $\,$ 









### A Full System Solution

GF Piping Systems offer extensive capabilities to the British market through faster delivery and installation, lower labour costs, and added security with the FUSEAL® factory built and tested system. Enabling less on-site jointing through bespoke fabrication, and an extended range of fabricated fittings, e.g. manholes and neutralisation tanks, which complete this one supplier system.

# Elementary protection

FUSEAL® thermoplastic corrosive waste piping system ensures the highest degree of protection from hazardous liquids, providing secure transfer of waste chemicals, keeping the environment and people safe.

FUSEAL® is the only thermoplastic chemical waste drainage in the UK, which has flame retardant properties. This provides added security to the end user. The distinctive colour and markings also give a clear identification.

The Fast-Lock™ jointing mechanism is unique to FUSEAL® and assists in a quick installation, with no grooving required. With electrofusion jointing technology also as standard, the lightweight data-storing welding machine makes installation hassle-free and easy to manage.

Fuseal® is a full-system solution from "sink to drain" with offsite fabrications ensuring a straightforward installation. With so many advantages, FUSEAL® is a high-quality chemical drainage system which is difficult to ignore.

### Sink to drain contained

With our production and fabrication facilities here in the UK, FUSEAL® provides a full complete system. There is also the option of a highly engineered dual-contained system.

### One system, many applications

Suitable for use anywhere where mixtures of acids, bases and solvents are conveyed, where stainless steel, cast iron, clay and generic plastic materials fail to stand up to the corrosive nature of certain waste streams. Most major pharmaceutical manufacturing facilities and the top universities worldwide have FUSEAL® currently installed.

### Fusion and jointing

An engineer or contractor can combine the benefits of the FUSEAL® electrofusion joint and the mechanical joint in a single system. FUSEAL® can be used in inaccessible areas: The Fast-Lock™ mechanical joint works well under benches, where speed of installation or future disassembly is needed. One lightweight welding machine can do all that is required on-site.

### Above-ground applications

In above ground installations, the pigmentation protects the system from sunlight. FUSEAL® is resistant to ultraviolet radiation and is heat-stabilised to provide long life while handling hot reagents.

### Below-ground applications

Whilst being perfect for above-ground systems, the FUSEAL® chemical drainage system is also a safe, secure and cost-effective choice for below-ground applications. Offering all the same benefits, the buried systems are additionally supported with a wide range of fittings, components and accessories that cover all possible configurations with fully bespoke options also readily available.

50%

Installation time saving of up to 50%

360°

Fully rotatable collar to allow for easy accessibility

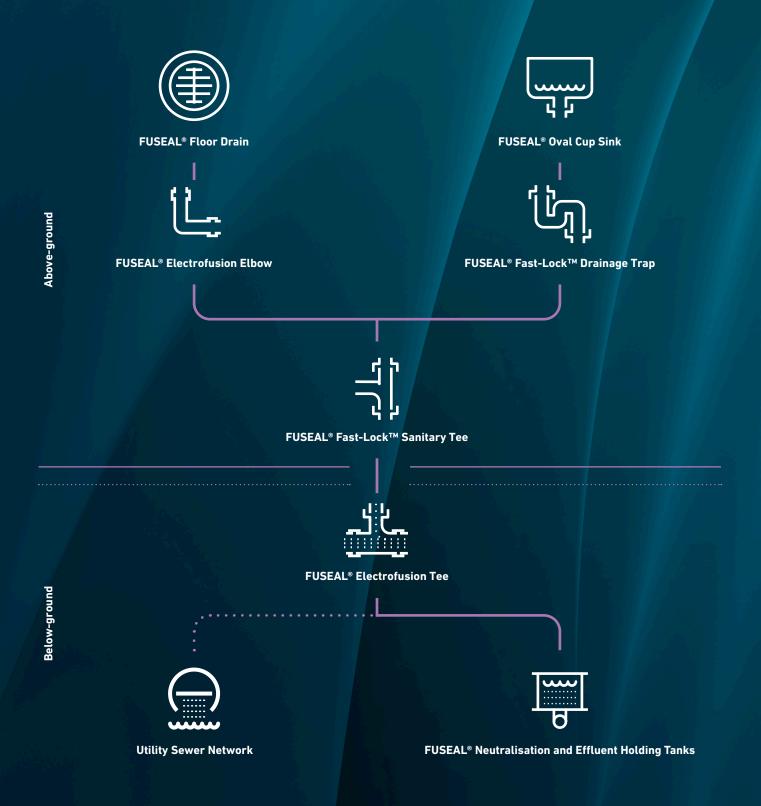
One

Complete system from start to finish

Zero

No special tools required for Fast-Lock™

## The greatest size range of pipes, fittings and accessories from discharge to treatment point



### **Key Applications**

### Chemical waste containment

Excellent chemical resistance and physical properties ideal for handling corrosive waste mixtures of acids, bases and solvents. Diluted mineral acids and aqueous solutions of acid salts, which are destructive to most metals.

### School, college and university laboratories

Science and education go hand-in-hand. During experiments, lessons and tests, laboratories need to safely discharge hazardous chemicals. With FUSEAL® the corrosive waste is securely drained away.

### Hospitals and the health sector

The health sector requires a vast array of chemicals to undertake tests and processes. FUSEAL® has been expertly designed to meet these needs.

### **Chemical process**

Industrial applications and factories where the processing of chemicals takes place, is another typical application where FUSEAL® can safely evacuate corrosive waste.

### Utilities

Water treatment, where the monitoring of the quantity, quality, filtering, pH levels, particulate matter, salts, and chlorine levels are all important in delivering clean water across the globe.

### Food and beverage

In applications where chemicals are required to clean and maintain a high level of hygiene, such as food & beverage, FUSEAL® can securely deal with corrosive waste to help maintain the hygiene levels required.



### Limitless containment



### Complete system solution

Complete system of pipes, fittings and accessories from sink waste to below ground, to main treatment plant, which completes this thermoplastic drainage solution.



### Colour

Distinctive colour and text clearly differentiates from other pipework system.



### Corrosion-free, robust plastic

Produced from a high-performance polymer which is simultaneously light, flexible, tough and exceptionally corrosion-resistant.



### **PP-Fire Retardant**

Flame retardant with UL-94 rating of V-2, and ASTM D635 rating of HB. 38mm to 152mm as standard.







### Multiple jointing technology

The system utilises both our patented Fast-Lock™ mechanical fastening and electrofusion jointing. Below ground system focuses on electrofusion and butt-fusion technology.



### Electrofusion welding machine

Lightweight machine (12kg) and weld logs available for full traceability.



### Global acceptance

Internationally approved for use by ASTM F1412 and capable of being installed in accordance with EN12056 and EN1852-1.



### **Dual containment**

System can be dual contained for added safety benefit.

### Worldwide at Home

Our sales companies and representatives ensure local customer support in over 100 countries

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