

**Chemical Compatibility Guide for:  
Disposable Drain Seal****NOTICE:**

The guide on the following page(s) was provided by the supplier. New Pig Limited assumes no responsibility, obligation, or liability in conjunction with the use or misuse of the information.

**For additional assistance, please contact New Pig Technical Services  
on 0800 919 900.**

---

**100% Money-Back Guarantee**

Buy with confidence knowing that everything we sell is backed by our 12-month Money-Back Guarantee! If you're not 100% satisfied with a product, just call one of our Sales and Service Advisors and they'll arrange for a free return and pick-up at no cost to you. We'll refund all VAT, shipping costs and any other incidentals, so there are never any hassles — we'll even take care of all the paperwork!

Hogs Hill, Watt Place, Hamilton International Technology Park, Blantyre G72 0AH • 0800 919 900  
Fax: 0800 731 50 71 • Email: [pigpen@newpig.com](mailto:pigpen@newpig.com) • Web: [newpig.co.uk](http://newpig.co.uk)

© New Pig Corporation. All rights reserved.

## **DISPOSABLE DRAIN SEAL**

### **RESISTANCE TO ATTACK FROM LIQUID CHEMICALS**

#### **General**

Tests show that the Disposable Drain Seal possesses good resistance to most organic liquids, solvents, hydrocarbons etc and will act as a secure barrier for at least 24 hours against these liquids.

The same applies to most aqueous solutions including dilute acids, all alkalis, and dilute hydrogen peroxide.

Care should be exercised with concentrated acids and strong oxidising agents, where the Disposable Drain Seal can only be expected to resist attack for 1-5 hours.

Where a spill cleanup is to be effected immediately (in less than 1 hour) the Disposable Drain Seal can be safely recommended as a seal against all liquids.

#### **Resistance Tests**

Using the 'Plug' method (see Appendix 1), the effects of various liquid chemicals on the Disposable Drain Seal were assessed at room temperature over a period of time according to the following criteria:

- . Effect on the surface of the mix
- . Effect on the structure of the mix
- . Length of time over which the material formed an effective barrier to chemical attack

**Please Note:** Barrier effectiveness times have been established using small samples to determine the chemical resistance.

Physical pressures combined with the chemical attack will seriously reduce the quoted times, and they are given here as a guide only.

Where chemical attack does occur, the thickness of the barrier is significant - even serious attack takes time to progress through the structure.

Key : N/C = No change, i.e. no significant effect.

Chemical Tested	Effect On Surface	Effect On Structure	Barrier Effective
Acetone	Sludgy at 2 Hours	Surface only	Over 24 Hours
Ammonia Solution 35% by weight	Sludgy at 1 Hour	Sludges	Over 24 Hours
Benzene	N/C	N/C	Over 24 Hours
Caustic Soda Liquor 50%	N/C	Hardened	Over 24 Hours
Chloroform	N/C	N/C	Over 24 Hours
Diesel Oil	N/C	N/C	Over 24 Hours
Hydrochloric Acid, Conc	Immediate Discolouration Hard crust forms	Hardened Crumbles	Up to 1 Hour
Hydrogen Peroxide 100 Vol	Very soft in 10 mins	Mixture Froths	Over 24 hours barrier, but serious bubbling as time goes on
Isobutyl Alcohol	Very slight cracking	N/C	Over 24 Hours
Methanol	Sludgy	Surface only	Over 24 Hours
Methylated Spirit	Sludgy	Surface only	Over 24 Hours
Methyl Isobutyl Ketone	N/C	N/C	Over 24 Hours
Nitric Acid, conc	Discolouration and cracking immediately	Destroyed cracks in layers, crumbles	Up to 1 Hour
Oil, Motor 20W50	N/C	N/C	Over 24 Hours

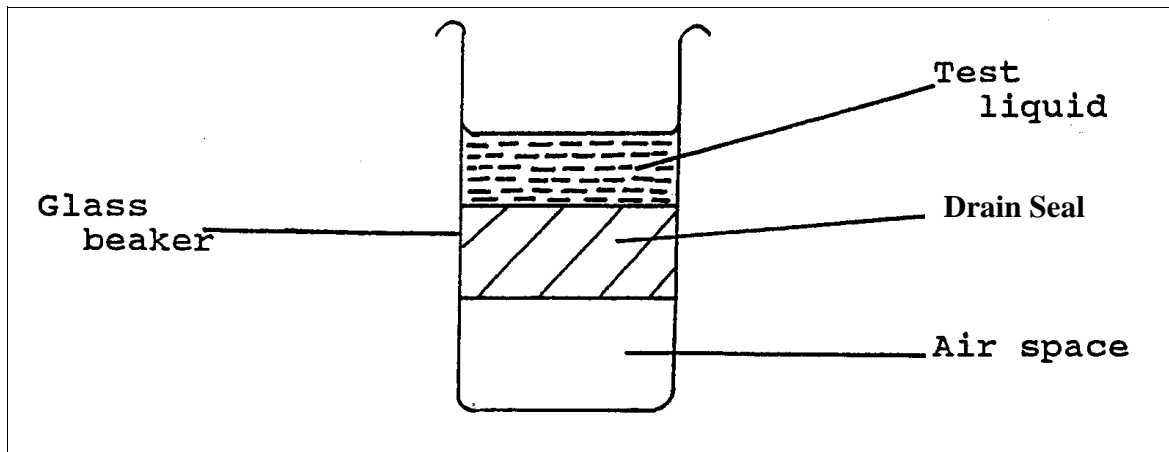
(Resistance, Continued)

Chemical Tested	Effect On Surface	Effect On Structure	Barrier Effective
Perchloric Acid	Cracks, Hardens	Hardened Crumbles	Up to 1 Hour
Petroleum Spirit	N/C	N/C	Over 24 Hours
Phosphoric, Ortho, Acid (98%)	Bubbles, Cracks	Hardened, crumbles	Up to 1 Hour
Salt Solution (10%)	Softens only	Surface	Over 24 Hours
Sea Water	Very sludgy	Surface only	Over 24 Hours
Sulphuric Acid, Conc	Bubbles, Hardens, Cracks	Hardened, crumbles	Up to 1 Hour
Sulphuric Acid, Dilute (0.02N)	Softens	Surface only	Over 24 Hours
Terpene, in proprietary cleaners	Softens	Surface only	Over 24 Hours
Tetrahydrofuran	Discolouration	N/C	Over 24 Hours
111, Trichlorethane	N/C	N/C	Over 24 Hours
Trichlorethylene	N/C	N/C	Over 24 Hours
Water, tap	Sludgy	Surface only	Over 24 Hours
Xylene	N/C	N/C	Over 24 Hours

Note : This list is not exhaustive.

### The Plug Method of Testing

A small plug of the Disposable Drain Seal is used to form a seal across a tall glass beaker (150ml), about half way down.



The Disposable Drain Seal is pressed against the sides of the glass, eliminating air pockets and ensuring an even seal.

Care must be taken not to compress the air below the plug, as the resulting pressure tends to lift the plug.

The finishing plug should be approximately 1.5cm deep with a smooth surface, and sufficient space above it to allow room for the test liquid.

Test liquid is then added to a minimum depth of 1cm in each trial, and the results evaluated at suitable time intervals, for example 1 min, 2 min, 5 min, 10 min, 30 min, 1 hour, 1.5 hours, 2 hours, 3 hours, 4 hours, 5 hours, and 24 hours.