SIMMONS epoxy products are moulded in a solid non-porous homogeneous epoxy resin. This is a monolithic, thermosetting, pigmented epoxy resin with inert fillers. The resin-rich epoxy formulation allows the production of precision designed moulded components which are:

- stronger
- lighter
- easier to ship and handle on-site

• **SIMMONS** epoxy components are post cured to optimise chemical resistance and mechanical strength.

• **SIMMONS** components are solid, rather than laminated and retain chemical resistance throughout.

• **SIMMONS** products are cast/moulded with an attractive semi-gloss finish and are available in standard colours: Grey, Dark Grey, White, Black and Cream (off-white). Other colours are available to special order.

Product Groups

Work-surfaces

Cast at a nominal thickness of 15 mm with a bonded raised lip (where required) of either 10 mm. or 7 mm. nominal height.

- Sheets are cast in two sizes: 3000 x 1000 mm (9.84 x 3.28 ft) and 2300 x 1250 mm (7.55 x 4.10 ft).
- Joints are factory machined for a biscuit joint to ensure that top surfaces are level. Supplied colour matched epoxy adhesive/grout and biscuits (tongues) allow strong level joints < 1mm wide.

Sinks

The Premier-select sink offering uses our latest mould designs and production techniques to create flanged sinks in a comprehensive range of sizes. They offer two fitment methods from the same sink bowl.

- **Undermount** - by screwing up to the work-surface through the flange.
- **Drop-in** - bonding the sink into a rebated cut-out so the flange finishes level with the work-surface, (ideal for simple site fitment).

. These are stocked items.

Fume cupboard (fume-hood) bases & liners

- Available in a range of common sizes offering a one-piece dished moulded work-surface. Simmons can achieve most requirements form these but also fulfil special requirements through fabrication using 15mm sheet and a comprehensive range of containment edging profiles.
- Fume cupboard lining panels can be supplied cut and machined to requirements from 6mm thick epoxy sheet from the same epoxy resin.

Sink & Drainer units (Sinktops)

Simmons will manufacture units to suit individual requirements.

- We have a range of standard units cast in one piece with joint free sink and drainer(s)
- If these are not suitable we can offer a customisable sheets with moulded drainers which can be supplied with flush fitted sinks in various sizes.
- Special requirements can be fulfilled through fabrication using 15mm sheet, edging and bonded drainer boards.

Bespoke Requirements

- For larger individual needs or projects, Simmons can design and manufacture new tooling in-house to create a bespoke single-piece mouldings.

Chemical Resistance

Laboratory testing SEFA 3 – 2020 (report dated 14th April 2026)

Chemical Spot Test

Test	Chemical (% by Vol)	Method	Rating
1	Acetate, Amyl	A	0
2	Acetate, Ethyl	A	1
3	Acetic Acid, 98%	B	0
4	Acetone	A	1
5	Acid Dichromate, 5%	B	2
6	Alcohol, Butyl	A	0
7	Alcohol, Ethyl	A	0
8	Alcohol, Methyl	A	0
9	Ammonium Hydroxide 28%	B	1
10	Benzene	A	0
11	Carbon Tetrachloride	A	0
12	Chloroform	A	2
13	Chromic Acid 60%	B	2
14	Cresol	A	1
15	Dichloroacetic Acid	A	1
16	Dimethylformanide	A	1
17	Dioxane	A	1
18	Ethyl Ether	A	1
19	Formaldehyde, 37%	A	0
20	Formic Acid 90%	B	0
21	Furfural	A	1
22	Gasoline	A	0
23	Hydrochloric Acid 37%	B	1
24	Hydrofluoric Acid 48%	B	2
25	Hydrogen Peroxide, 30%	B	0
26	Iodine, Tincture of	B	2
27	Methyl Ethyl Ketone	A	1
28	Methylene Chloride	A	2
29	Monochlorobenzene	A	1
30	Naphthalene	A	0
31	Nitric Acid, 20%	B	1
32	Nitric Acid, 30%	B	1
33	Nitric Acid, 70%	B	2
34	Phenol, 90%	A	1
35	Phosphoric Acid, 85%	B	1
36	Silver Nitrate, Saturated	B	0
37	Sodium Hydroxide, 10%	B	1
38	Sodium Hydroxide, 20%	B	1
39	Sodium Hydroxide, 40%	B	1
40	Sodium Hydroxide, Flake	B	1
41	Sodium Sulfide, Saturated	B	1
42	Sulfuric Acid, 33%	B	1
43	Sulfuric Acid, 77%	B	1
44	Sulfuric Acid, 96%	B	3
45	Sulfuric Acid, 77% andNitric Acid 70% equal parts	B	2
46	Toluene	A	0
47	Trichloroethylene	A	1
48	Xylene	A	0
49	Zinc Chloride, Saturated	B	0

Test Method A

For volatile chemicals – A cotton ball, saturated with the test chemical, was placed in a one ounce bottle (10mm x 7mm test tube or similar container). The container was inverted on the test material surface for a period of 24 hours. Temperature of test: 23° +/- 2°C (73° +/- 4°F).

Test Method B

For non-volatile chemicals – Five drops (1/4cc) of the test chemical were placed on the test material surface. The chemical was covered with a watch glass (25mm), convex side down for a period of 24 hours. Temperature of test 23° +/- 2°C (73° +/- 4°F).

Rating Scale:

Level 0 – No Effect No detectable change in the material surface.

Level 1 – Excellent Slight detectable change in colour or gloss but no change in function or life of the surface.

Level 2 – Good

A clearly discernible change in colour or gloss but no significant impairment of surface life or function.

Level 3 – Fair

Objectionable change in appearance due to discoloration or etch, possibly resulting in deterioration of function over an extended period of time.

	Summary Results Chemical Spot Test: Samples			
Items	**Requirement**		**No of Reagents with a 3 Rating**	**Disposition**
Volatile Subtotal	---		0	---
Non-Volatile Subtotal	---		1	---
Grand Total	No more than four Level 3 Conditions		1	Conforming

Mechanical Properties

Modulus (MPa)*	8753
Strength at Break (MPa)*	55
Elongation at Break (%)*	1
Flexural Strength (MPa)*	86.44
Compressive Strength (MPa)*	149
Heat deflection temperature Tg	120-130°C
Density	x
Water absorption, 24 hours	5-10 mg (0.06-0.068%), ISO 62
Linear thermal expansion coefficient	34 x 10^{-6} /°C

**Method used (Date of test 30th March 2026)*		
Tensile	*ISO 527-2*	*2012*
Flex	*ISO 178*	*2019*
Compression	*ISO 604*	*2003*

Note: SIMMONS epoxy components are not suitable for use with Dry Ice or Liquid Nitrogen.

Use In Radioactive Areas (Test: BS 4247 Part 1 Test A)	
Decontamination factor (geometric mean)	5598.0
Deviation factor	1.25
Ease of decontamination classification	Excellent

Fire Resistance

When tested in accordance with UL 723, the material achieved a Flame Spread Index of 10 and a Smoke Developed Index of 350, meeting the requirements for a **Class A surface-burning classification.**	
Flame Spread Index (FSI):	10
Time to Ignition (sec):	198
Maximum Flame Spread (ft):	7
Smoke Developed Index (SDI):	350
UL 723, Test for Surface Burning Characteristics of Building Materials - 15th September 2025	

Simmons Epoxy Resin Worktops and Sinks - Care & Maintenance

As with all worktops a reasonable standard of laboratory housekeeping will help to keep Simmons epoxy resin worktops and sinks in good condition.

All spillages should be cleaned up as soon as possible. Staining agents and aggressive chemicals should not be allowed to sit in contact with the tops for a prolonged period of time.

If water or standard cleaning products are ineffective, more stubborn dirt and stains can be removed by wiping with acetone or similar organic thinners. This will not affect the worktop or sink in any way.

Areas of more serious chemical attack or staining can be removed with a polishing compound or very fine abrasive paper but it should be stressed that this will alter the finish of the surface. As a homogeneous solid product, performance of the worktop or sink will not be affected.

The use of a wax furniture polish will help to retain the gloss finish.