

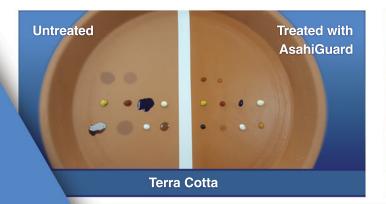
## **ASAHIGUARD** for Stone and Tile

# Rock-Solid Stain Protection

Decorative and functional stone and tile add aesthetic value throughout both the interior and exterior of building structures. Countertops, flooring, patios, walkways, walls, hearths, backsplashes, fireplaces, and pool aprons are just a few of the applications that incorporate these materials and add value to any property.

AsahiGuard™ for Stone and Tile, now available from AGC Chemicals, provides the broadest and most effective deterrent to liquid stains that can spoil the appearance of both porous and polished stone and tile. AGC Chemicals is a leading global supplier of a wide array of high performance fluorochemicals, including resins, compounds, elastomers, specialty chemicals and materials.

AsahiGuard for Stone and Tile is a line of high-performance fluorinated water and oil repellents providing protection against food, beverage, oil, and water spills. The products use environmentally-friendly fluoropolymers dispersed in water to repel liquids by forming a low-energy surface coating on the material to which it is applied. The coated surface becomes energetically favorable to resist and repel most common stains.





## **Benefits**

## and Attributes

- Surface protection against stains
  - · Gives longevity and durability to surfaces
    - High performance sealant with one application
      - Factory or field applied with brush or roller
        - · Non-flammable, non-corrosive

- High compatibility
- Improves aesthetics
- Non-odorous
- Breathability

### **Tech Center**

Fully equipped Technical Service Center providing a variety of services and testing including:

- Oil/Water repellency
  - Stain resistance
    - Cleanability
      - · Formulation recommendations and development
      - On-site support for product trials



## **Stain**

# Repellency Results

	Bead	ding	نې	Nine .	ge ,	tero Sard	ghis Bhis	ILIA MAN	onnaise	oil ,	7. s	ian Lotik	oil Soil	% Easy Clean
Polished	Water	Oil	Red	MI. Cott	Mus	, feg	Bluk	Man	Mot	or God	a Suri	. Oliv	Sum	Factor
Untreated	3	1	3	2	3	3	3	1	0	2	1	0	18	55%
AG-E01ST/MS	3	2	2	1	2	2	2	1	0	2	1	0	13	68%
AG-E03ST/MS	3	3	2	1	2	2	2	1	0	2	1	0	13	68%
AG-E03ST/H2O	4	3	1	0	1	1	1	0	0	1	1	0	6	85%
AG-E11ST/H2O	4	3	1	1	1	1	1	1	0	1	0	0	7	83%
AG-E06ST/H2O	3	2	2	1	2	2	1	1	0	2	1	0	12	70%

	Bead	ding	Repel	lency	₽ <sub>6</sub> 0	wine.	œ :	kard .	HUP	e lux	ornaise Not	oil o		tan Lotif	or Oil	% Easy Clean
Porous	Water	Oil	Water	Oil	4 <sub>60</sub>	ငတ်	Mus	s, tei	Blu	Mar	Mo	od god	GIIR	i Oliv	Sum	Factor
Paver																
Untreated	0	0	0	0	1	0	0	0	4	1	3	0	3	2	14	65%
AG-E01ST/MS	4	4	8	4	0	0	0	0	2	0	1	0	1	1	5	88%
Saltillo (Terra Cotta	a)															
Untreated	0	0	0	0	1	3	4	3	4	4	4	0	4	4	31	23%
AG-E01ST/H2O	5	3	8	6	0	0	0	0	1	0	2	0	0	1	4	90%
AG-E02ST/H2O	4	3	8	6	0	0	0	0	1	0	1	0	1	0	3	93%
AG-E03ST/H2O	3	3	8	6	0	0	1	0	1	0	1	0	1	0	4	90%
AG-E04ST/H2O	4	3	8	6	0	0	0	0	1	0	0	0	2	1	4	90%

# 5 Excellent Contact Angle 100-120° 4 Very Good Contact Angle 75-90° 3 Good Contact Angle 45-75° 2 Fair Contact Angle 25-45° 1 Poor Contact Angle 10-25° 0 Penetration

### Water Repellency

Chart Score = Highest Liquid That Does Not Penetrate

Test Solution #	DI Water (% Vol.)	Isopropanol (% Vol.)	Tension (mN/m)
1	98	2	59.0
2	95	5	49.8
3	90	10	41.6
4	80	20	32.5
5	70	30	27.4
6	60	40	25.4
7	50	50	24.5
8	40	60	24.0
9	30	70	23.4
10	20	80	22.7
11	10	90	21.9
12	0	100	21.8

### Oil Repellency

Chart Score = Highest Liquid That Does Not Penetrate

Test Solution #	Description	Surface Tension (mN/m)
1	100% Mineral Oil	31.5
2	65% Mineral Oil/35% n-Hexadecane	29.2
3	n-Hexadecane	27.3
4	n-Tetradecane	26.2
5	n-Dodecane	24.2
6	n-Decane	23.6
7	n-Octane	21.8
8	n-Heptane	19.7

### **Stain Rating Performance After Drying**

- 0 No visible stain
- 1 Slight stain perceptible
- 2 Visible stain without clearly defined outline
- 3 Stain with a clearly defined outline but not very deep in color
- 4 Stain with a clearly defined outline, deep in color
- **5** Deep stain that clearly penetrated the fabric to substrates

%ECF = Easy Clean Factor

 $\%ECF = (40-\Sigma scores)/40 \times 100\%$ 

MS = Odorless Mineral Spirits



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