

# Hi-Genie S

## GERMICIDAL COATINGS

**Kills 99.99% of e-Coli, MSRA and other harmful organisms**

**Hi-Genie S** hygienic coatings are durable, two part, water based paints that contain a non toxic silver biocide that quickly kill 99.99% of harmful bacteria such as e-Coli and MSRA.

- Hygienic - kills virtually all bacteria within 24 hours
- Extremely durable, tough and hardwearing
- Stain resistant, oil & grease is easily removed without a trace
- Non yellowing, inherently UV resistant
- Heat resistant and steam cleanable
- Can be used in wet conditions
- Smooth non porous surface is easy to clean
- High opacity with excellent covering power
- Safe to use, safe in use, safe for the environment, zero VOC content.
- Negligible odour
- Easy to mix and apply with long pot life.

**Hi-Genie S** is based on an entirely new coating technology that combines the latest developments in acrylic emulsion technology with conventional polyurethane chemistry. The result is a range of products that have the durability and application qualities of conventional two component coatings combined with the environmental and health friendliness of water based coatings that are entirely free of volatile organic compounds (VOC) and other hazardous ingredients.



Products such as tomato ketchup that have been in contact with Synacryl and Hi-Genie S coatings for several days can be wiped away without a trace.

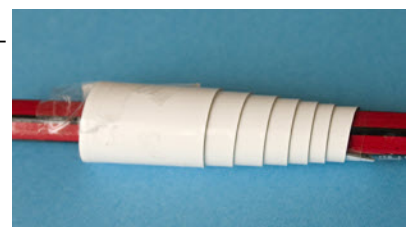
**Hi-Genie S** is recommended for arduous heavy duty applications and situations where frequent cleaning is necessary. Suggested applications are the walls of food factories, dairies, kitchens etc and the high wear areas of hospitals and nursing homes where it is advantageous to reduce the frequency of redecorating.



**Hi-Genie S** coatings are recommended for use on areas that require frequent cleaning.

**Hi-Genie S** has excellent abrasion resistance. It is extremely tough and hardwearing and is resistant to staining by many materials including tomato sauce, curry sauce, cooking oil etc.

**Hi-Genie S** is incredibly flexible even though it provides a hard surface. The coating is resistant to impact damage that causes the substrate to dent or deform.



Synacryl and Hi-Genie S coatings are so flexible that when applied to a flexible substrate they can be wound around a pencil without cracking or loss of adhesion.

**Hi-Genie S** is easy to clean, is scrub-able and steam cleanable. It is impervious to all popular cleaning products including bleach, acid and caustic cleaners, detergents, disinfectants etc.

**Hi-Genie** has excellent adhesion to most substrates, even to difficult materials such as polished stainless steel.

# Hi-Genie S

## BIOCIDAL TESTING

Samples of Hi-Genie S were tested according to the JIS Z 2801:2000 method, briefly summarised as follows;

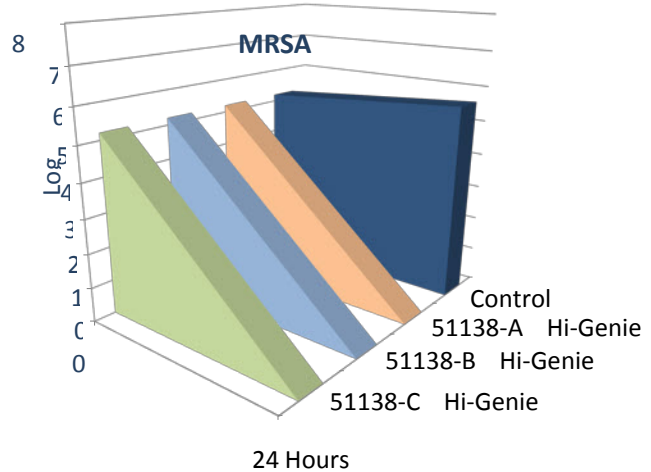
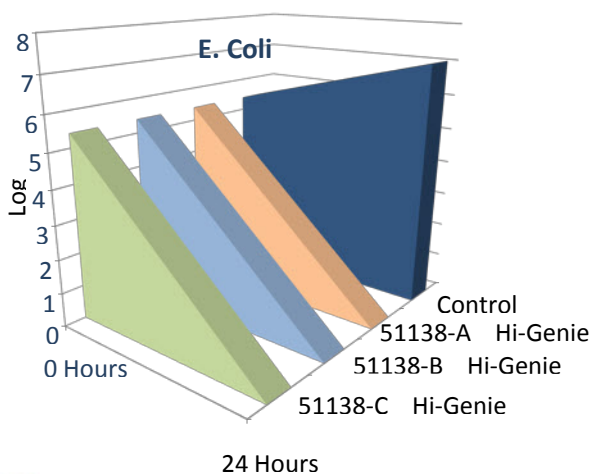
Each test sample was inoculated with a suspension of MRSA or E-Coli. The inoculum was held in contact with the test sample using a sterile polyethylene film.

The bacterial population on three control replicates were evaluated immediately following inoculation. This was assumed to be the initial population on all test samples (i.e. the population at zero hours).

The remaining samples were incubated for 24 hours, at which time the bacterial population was evaluated.

TEST RESULTS						
SAMPLE	Results – E. Coli			Results – MSRA		
	CFU at 0 hours	After 24 Hours		CFU at 0 hours	After 24 Hours	
		CFU	% CHANGE		CFU	% CHANGE
Control	$2.5 \times 10^5$	$1.1 \times 10^7$	4300% growth	$1.6 \times 10^5$	$4.6 \times 10^5$	188% growth
51138-A Hi-Genie S	$2.5 \times 10^5$	<10	>99.996% reduction	$1.6 \times 10^5$	<10	>99.994% reduction
51138-B Hi-Genie S	$2.5 \times 10^5$	<10	>99.996% reduction	$1.6 \times 10^5$	<10	>99.994% reduction
51138-C Hi-Genie S	$2.5 \times 10^5$	<10	>99.996% reduction	$1.6 \times 10^5$	<10	>99.994% reduction

**Notes:** CFU = Colony Forming Units  
The theoretical limit of detection is 10 CFU. If no bacteria are recovered, the result is reported as “<10 CFU”



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They include resins and coatings for marine and industrial applications.

# Hi-Genie S

**Hi-Genie S** coatings are available in the following grades.

**Hi-Genie S Gloss** is a hygienic full gloss coating that is suitable for application to walls, wood and metal work.

**Hi-Genie S Sheen** dries to a pleasing semi gloss finish. Suitable for walls and ceilings.

**Hi-Genie S Mat** is formulated with extremely fine fillers that produce a hard but very smooth mat surface that is suitable for walls and ceilings.

**Hi-Genie S Varnish** is a high gloss varnish that is suitable for interior and exterior use.

**Hi-Genie S** hygienic coatings are recommended for use where sterile surfaces are required. For other areas and exterior applications use **SYNACRYL** products which are similar materials that do not contain the silver biocide.

Hi-Genie S Specification				
	Gloss	Sheen	Mat	Varnish
<b>Solids content</b>	<b>60%</b>	<b>65%</b>	<b>69%</b>	<b>47%</b>
<b>Volatile Organic Compounds</b>	<b>0%</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Density</b>	<b>1.26</b>	<b>1.32</b>	<b>1.44</b>	<b>1.04</b>
<b>Solvent</b>	<b>Water</b>			
<b>Pot life</b>	<b>4 - 6 hours depending on temperature</b>			
<b>Application temperature</b>	<b>5 - 30°C</b>			
<b>Colours available</b>	<b>A range of colours are available and special shades can be made to order</b>			
<b>Pack sizes</b>	<b>1, 2.5, 5 and 10 litre plastic containers</b>			

## APPLICATION INSTRUCTIONS

**PREPARATION** Surfaces must be clean and free from contamination such as oil and grease. Gloss surfaces should preferably be sanded with fine abrasive to provide a key.

**MIXING** Pour all of the hardener into the can of **Hi-Genie S** coating and stir continuously for several minutes. Large quantities are preferably stirred with a powered mixer. Mix ratios are not critical but if only a part can of material is required we recommend that the components are proportioned by weight according to the mix ratio stated on the hardener label. **Hi-Genie S** coatings have a long pot life, up to 8 hours in cold conditions.

**APPLICATION** **Hi-Genie S** coatings can be applied by brush, roller, airless or conventional spray. For roller application short pile mohair or foam rollers produce the best results with very little stipple.

**HEALTH & SAFETY** **Hi-Genie S** coatings are non hazardous but the hardeners are irritants. No safety precautions are required during brush or roller application except the wearing of rubber gloves. However when spraying **Hi-Genie S** coatings breathing apparatus must be worn to prevent inhalation of atomised isocyanate prepolymer that can cause serious lung damage. Please refer to the relevant Safety Data Sheet for more information.

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