# HI-MACS<sup>®</sup> Acrylic Solid Surface

# HI-MACS® Solid Surface Technical Data Sheet

HI-MACS<sup>®</sup> Acrylic Solid Surface sheet material is manufactured from an acrylic resin, pigments for colour and alumina trihydrate as the filler. HI-MACS<sup>®</sup> Acrylic Solid Surface can be fabricated using standard wood working equipment. Some colours can be thermoformed to a minimum internal radius of 6mm.

# APPLICATIONS

HI-MACS<sup>®</sup> Acrylic Solid Surface is suitable for many interior surface applications. It is ideal for kitchen and bathroom benchtops, counters, reception desks, wall and column cladding, commercial bars and many other vertical and horizontal applications.

HI-MACS<sup>®</sup> Acrylic Solid Surface is non-porous with consistent colour throughout the sheet. It cannot delaminate and resists many stains. It has excellent hygienic performance. HI-MACS<sup>®</sup> Acrylic Solid Surface is NSF 51 Certified for Food Preparation areas, that can be applied in many applications where sanitation is of the utmost importance, such as Kitchen Countertops, Hospitals, Playrooms, Schools, and many more.

HI-MACS<sup>®</sup> Acrylic Solid Surface carries the Declare Red List Free status which shows it is free of the worst in class chemicals and materials from a human and ecological health standpoint across the lifecycle of the product.

## SUPPLY AND WARRANTY

HI-MACS<sup>®</sup> Acrylic Solid Surface is supplied only through authorised fabricators. The product is covered by a 15 year limited warranty by Laminex New Zealand<sup>™</sup> when fabricated and installed according to the Fabrication Manual by authorised fabricators and installers.

# SURFACE PROPERTIES

HI-MACS® Acrylic Solid Surface is made from an acrylic resin system. HI-MACS® Acrylic Solid Surface has high resistance to many chemicals and is therefore, an ideal laboratory benchtop material. However, in all cases, testing of chemicals and stains should be undertaken prior to any final decision, due to the wide and varied chemical types and concentration.

**Note:** Test Results may vary due to colour and exposure time. It is highly recommended that all stains are removed as quickly as possible to reduce the staining of the surface. Certain chemicals may damage HI-MACS<sup>®</sup> Acrylic Solid Surface.

## LIMITATIONS

HI-MACS® Acrylic Solid Surface withstands normal wear and tear. Here are some guidelines to assist in HI-MACS® Acrylic Solid Surface application and use:

Avoid leaving hot appliances or utensils in direct contact with HI-MACS<sup>®</sup> Acrylic Solid Surface. Use a trivet for hot pans or utensils to protect the surface.

HI-MACS® Acrylic Solid Surface is intended for interior use only. Selected colours for outdoor use only.

Refrain from sliding hard or heavy objects across the counter top surface as this may cause scratching. Scratching on darker surfaces will be more visible than on lighter colours and will require more ongoing maintenance.

## THERMOFORMING GUIDE

Unlike many other materials, HI-MACS<sup>®</sup> Acrylic Solid Surface can be thermoformed to create any desired shape to fit your needs. Please see the table below to find the minimum radius that each colour can be thermoformed to.

Product #	Colour	Colour Code	Sub-Category	Minimum internal thermoforming radius		
3680 x 760 x 12mm						
991498	Alpine White	S028	Solids	50mm		
991499	Artic White	S006	Solids	50mm		
991500	Diamond White	S034	Solids	50mm		
991506	Opal	S302	Lucent	50mm		
991507	Ruby	S304	Lucent	50mm		
991508	Arctic Granite	G034	Granite	60mm		
991525	Candy White	G235	Granite	60mm		
991528	Corona	G110	Granite	60mm		
991529	Crystal Beige	G101	Granite	60mm		
991538	Whinstone	G115	Granite	60mm		
991539	White Quartz	G004	Granite	60mm		
991522	Steel Concrete	G555	Concrete	60mm		
991547	Gemini	VW01	Volcanics	200mm		
991550	Andromeda	T017	Aster (Galaxy)	200mm		
991544	Intense Ultra Black	S922U	Intense Series	6mm		
991498	Ultra Alpine White	S928U	Intense Series	6mm		
991556	Ancona	M423	Marmo	200mm		
991551	Aurora Bianco	M606	Marmo	100mm		
991622	Aurora Grey	M608	Marmo	100mm		
991553	Aurora Pavia	M603	Marmo	100mm		
991555	Aurora Sanremo	M605	Marmo	100mm		
991554	Aurora Torano	M601	Marmo	100mm		
991621	Laviano	M426	Marmo	200mm		
991620	Passo	M421	Marmo	200mm		
6mm COLOURS						
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Product #	Colour	Colour Code	Sub-Category	Minimum internal thermoforming radius
3680 x 760 x 6mm				
991496	Alpine White	S028	Solids	20mm
20mm COLOURS				
Product #	Colour	Colour Code	Sub-Category	Minimum internal thermoforming radius
3680 x 760 x 20mm				
991540	Alpine White	S028	Solids	100mm

Classification	%	Gritty	Scotch Brite™	Classification	%	Gritty	Scotch Brite™
		Cleaner or Water	(or Sandpaper for professional repair)			Cleaner or Water	(or Sandpaper for professional repair)
Acetic Acid	5	✓	••••••••••••••••••••••••••••••	Kerosene	20	✓	
Acetic Acid	10	1		Methyl Alcohol	5	1	
Acetic Acid	90		1	Methyl Ethyl Ketone		1	
Acetic Acid	98		1	Mineral Oil		1	
Acetone		1		Nitric Acid	10		✓
Aqua Regia			1	Nitric Acid	30		1
Ammonia	10	1		Nitric Acid	40		✓
Ammonium Hydroxide	5	1		Nitric Acid	70		1
Ammonium Hydroxide	28	1		Phenol	40		1
Benzene		1		Phenol	85		1
Calcium Thiocyanate	78	1		Phosphoric Acid	25		1
Chloric Hydroxide	20		1	Phosphoric Acid	85		1
Chloroform	100		1	Silver Nitrate	10	1	
Citric Acid	10	1		Sodium Hydroxide	10	1	
Dimethyl Formamide		1		Sodium Hydroxide	25	1	
Ethanol	95	1		Sodium Hydroxide	40	1	
Ethyl Ether		1		Sodium Hypochlorite		1	
Formic Acid	88		1	Sodium Sulphate		1	
Formaldehyde		1		Sulphuric Acid	25	1	
Furfural			1	Sulphuric Acid	30	1	
Gasoline		1		Sulphuric Acid	77		1
Hydrochloric Acid	10	1		Sulphuric Acid	96		1
Hydrochloric Acid	20	1		Toluene			1
Hydrochloric Acid	37	1		Xylene		1	
Isopropyl Alcohol		1		Zinc Chloride		1	

# **TEST METHOD**

Test method is based on 16 hours of exposure per substance. For exposure to chemicals other than as seen above, it is recommended to test on a sample piece of HI-MACS<sup>®</sup> Acrylic Solid Surface to confirm suitability for application. Common domestic residues, such as the examples listed below, may be removed with water and household cleaners.

Alcohol	Hair dyes	Shoe polish	
Ink	Juices	Soy sauce	
Cigarette stain	Lipsticks	Sugar	
Coffee	Lotions	Tea	
Cooking oil	Mustard	Tomato sauce	
Crayon	Nail polish	Vinegar	
Curry powder	Pencil lead	Wine	
Make-up	Salt	Food colouring	

## SURFACE COMPOSITION

HI-MACS<sup>®</sup> Acrylic Solid Surface is made with a composition of Methyl Methacrylate (MMA) and Poly Methyl Methacrylate (PMMA) resin filled with Alumina-Trihydrate and other specialised formula to give it the timeless beauty and quality.

MATERIAL NAME	COMPONENT
MMA (Methyl Methacrylate)	Resin
PMMA (Poly Methyl Methacrylate)	Resin
AL (OH) 3 – Alumina Trihydrate	Filler
Cross Linking Agents, Stabilisers, Curing Agents, Pigments, etc.	Curing additives

### PRODUCT RANGE FABRICATION

The fabrication and installation of all components using HI-MACS<sup>®</sup> Acrylic Solid Surface should be carried out by an authorised HI-MACS<sup>®</sup> Acrylic Solid Surface Fabricator.

THICKNESS	SHEET SIZE		
6mm	2490 x 760mm		
12mm	3680 x 760mm		
20mm	3680 x 760mm		

## MAINTENANCE

On a day-to-day basis, HI-MACS® Acrylic Solid Surface can be kept clean using a sponge and soapy water. For any marks, stubborn stains etc, or for a thorough clean use a mild abrasive cleanser, like Ajax® or Jif®, and a soft cloth with lots of water. Using these regularly helps to maintain a beautiful, satin lustre on your surface.

To repair large chips, deep scratches, severe burns etc, a HI-MACS<sup>®</sup> Acrylic Solid Surface Fabricator must be contacted.

Should further information on HI-MACS<sup>®</sup> Acrylic Solid Surface be required, contact Laminex New Zealand<sup>™</sup> on 0800 303 606 from anywhere in New Zealand for fabricator, display and general advice.

## FOOD SERVICE COUNTERTOPS

Food service counter tops will require different design, fabrication and installation techniques due to the HI-MACS® Acrylic Solid Surface benchtop's possible exposure to greater temperature stresses than a residential installation.

### FINISH

A matt or semi-gloss finish is recommended on high wear surfaces. Gloss finish on any colour will be visible particularly on a dark pigmented gloss finish.

Ultra-Intense Black: To achieve an extreme black look the surface needs to have a gloss finish.