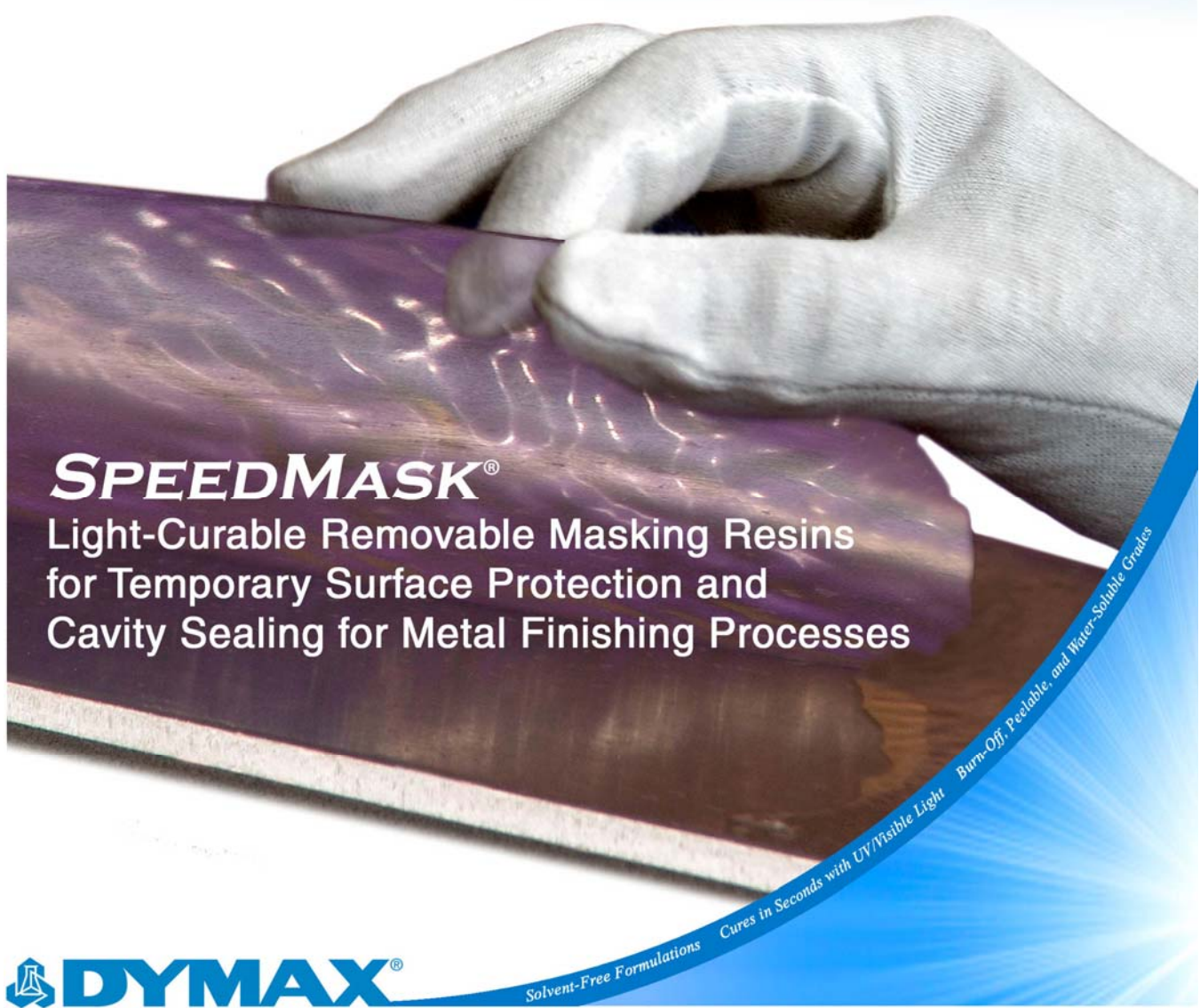


Supporting Metal Finishing, Aerospace, and Power Generation Component Processing Dip, Coat, Spray, and Screen Print



# **SPEEDMASK<sup>®</sup>** Light-Curable Removable Masking Resins for Temporary Surface Protection and Cavity Sealing for Metal Finishing Processes

Solvent-Free Formulations Cures in Seconds with UV/Visible Light Burn-Off, Peelable, and Water-Soluble Crusts

## About DYMAX

DYMAX pioneered the development of light-curable (UV or UV/Visible) adhesives for industrial applications. With over 30 years of manufacturing experience with light-curable materials, DYMAX continues to provide manufacturers with innovative products and solutions that result in improved productivity and reduced processing costs.

A global team of technical professionals is dedicated to assisting manufacturers with product selection, dispensing options, curing recommendations, and process validation that make their manufacturing more efficient.

DYMAX understands the demands of the turbine-finishing market. This selector guide identifies **SPEEDMASK®** product offerings for typical applications involving chemical processes, media finishing, coatings, and manufacturing aids.

Light-curable **SpeedMask** temporary masking resins offer manufacturers the following benefits:

- The ability to cure in seconds upon exposure to UV/Visible light, enabling faster processing, greater throughput, and lower manufacturing costs
- Residue-free removal through peeling, burning off, or dissolving in water
- The ability to be applied by spraying, dipping, or coating
- Full compliance with the RoHS Directives 2002/95/EC and 2003/11/EC
- No nonreactive solvents



## New Technology Advancements

### See-Cure Color-Change Technology

DYMAX has answered the two most important questions in the adhesives industry:

- How do I know that a sufficient amount of masking resin has been dispensed onto my substrate?
- How do I know the maskant is fully cured?

DYMAX maskants formulated with See-Cure technology start out bright blue in their uncured state, making them highly visible on substrates. During the light-curing process, the blue color transitions to pink indicating that sufficient light energy was received, providing a visual indication that the material is fully cured. This visual cure-indicator may initially be used to qualify the process, and then be used to ensure that the process remains within the qualified parameters.

Visit [www.dymax.com/seeitcure](http://www.dymax.com/seeitcure) for more information.

### Table of Contents

### Page

#### CHEMICAL PROCESSES

- Acid Stripping 3
- Anodizing 4
- Plating 5
- Chemical Milling 6

#### COATINGS

- Air Plasma Spray 7
- Painting and Powder Coating 8

#### MEDIA FINISHING

- Grit Blasting 9
- Shot Peening 10
- Vibratory Finishing 11

#### PARTS HANDLING

- General Masking 12

#### MANUFACTURING AIDS

- Machining 13
- Airflow Testing 14

#### CURING EQUIPMENT

15

## Chemical Processes – ACID STRIPPING

**S****PEEDMASK**<sup>®</sup> light-curable masking resins provide reliable surface protection of intricate and complex configurations during the acid-stripping process to remove coatings in the overhaul and repair of turbine components.

**SpeedMask** resins have been formulated to withstand soaking in hot acid without permeation or seepage under the mask. When cured, the resins provide superior surface protection from chemical processing of nickel super alloys, steel, and titanium.

The temporary maskants will hold up to the surface preparation of grit blasting, which may be required prior to or in combination with the hot-acid soak.

**SpeedMask** resins can tolerate most acid soaks such as Hydrochloric (HCl), Nitric (HNO<sub>3</sub>), Acetic (CH<sub>3</sub>COOH), Phosphoric (H<sub>3</sub>PO<sub>4</sub>), Hydrofluoric (HF), or various combinations of the acids.

- Resins cure in seconds enabling faster processing, greater output, and lower processing costs
- Residue-free removal
- Applied by spraying, dipping, or coating



### **SpeedMask**<sup>®</sup> Light-Curable Temporary Masking Resins for ACID STRIPPING Processes

Product	Features and Benefits	Nominal Viscosity, cP (20 rpm)	Shore Hardness	24-Hour Water Absorption	Modulus of Elasticity MPa [psi]	Cure Time *
<b>Burn-Off</b>						
<b>729</b>	Next generation formulation; UV/Visible light curing; high adhesion to nickel super alloys; resists acids and alkalis; hard and durable	20,000	D70	0.4%	240 [35,000]	30 seconds
<b>Peelable</b>						
<b>728-G</b>	Next generation formulation; UV/Visible light curing; high adhesion; easy removal after hot-water soak; superior product with excellent surface protection to aggressive chemical processes; high-visibility green color	25,000	D55	2.1%	83 [12,000]	10 seconds

\*Cure time based upon DYMAX 5000-EC Light-Curing Flood Lamp System (200 mW/cm<sup>2</sup>)

## Chemical Processes – ANODIZING

**S**PEEDMASK® light-curable masking resins provide superior surface protection during the anodizing of turbine and other metal components.

**SpeedMask** resins have been formulated with more chemical resistance for better surface protection from the strong acids used in the anodizing process. The cured maskant protects the substrate surface while the oxide layer of coating (which is designed to change the microscopic texture of the component surface) is being applied.

**SpeedMask** resins can tolerate most Type I (Chromic Acid), Type II (Sulfuric Acid), or Type III (Hardcoat) anodizing processes.

- Resins cure in seconds enabling faster processing, greater output, and lower processing costs
- Residue-free removal
- Applied by spraying, dipping, or coating



### SPEEDMASK® Light-Curable Temporary Masking Resins for ANODIZING Processes

Product	Features and Benefits	Nominal Viscosity, cP (20 rpm)	Shore Hardness	24-Hour Water Absorption	Modulus of Elasticity MPa [psi]	Cure Time *
<b>Peelable</b>						
<b>726-SC</b>	Next generation formulation; UV/Visible light curing; moderate adhesion; easy to remove; excellent protection during moderate-pressure blasting; See-Cure technology resin transitions from blue to pink upon sufficient exposure to light energy	45,000	D40	20%	3.9 [560]	8 seconds
<b>728-G</b>	Next generation formulation; UV/Visible light curing; high adhesion; easy removal after hot-water soak; superior product with excellent surface protection to aggressive chemical processes; high-visibility green color	25,000	D55	2.1%	83 [12,000]	10 seconds
<b>730-BT</b>	UV/Visible light curing; moderate adhesion; easy to remove; excellent surface protection and chemical resistance; trimmable after cure; high-visibility blue color	20,000	D35	0.3%	16 [2,444]	4 seconds

\*Cure time based upon DYMAX 5000-EC Light-Curing Flood Lamp System (200 mW/cm<sup>2</sup>)

## Chemical Processes – PLATING

**S****PEEDMASK**<sup>®</sup> light-curable masking resins provide superior surface protection of turbine and other metal components during various plating processes.

**SpeedMask** resins have been formulated with chemical and heat resistance to protect masked areas during plating processes where particles are deposited onto conductive surfaces. These resins are able to withstand the most common plating processes such as Electroless Nickel (Ni), Platinum (Pt), Chrome (Cr), Gold (Au), Silver (Ag), and Copper (Cu).

**SpeedMask** temporary masking resins are available in low, moderate, and high levels of adhesion to accommodate the various operating temperatures of plating baths. The higher the temperature of a plating process, the higher the maskant adhesion will need to be. The higher the pH of a plating bath, the greater the need for a chemical-resistant maskant.

- Resins cure in seconds enabling faster processing, greater output, and lower processing costs
- Residue-free removal
- Applied by spraying, dipping, or coating



### **SPEEDMASK**<sup>®</sup> Light-Curable Temporary Masking Resins for PLATING Processes

Product	Features and Benefits	Nominal Viscosity, cP (20 rpm)	Shore Hardness	24-Hour Water Absorption	Modulus of Elasticity MPa [psi]	Cure Time *
<b>Peelable</b>						
<b>726-SC</b>	Next generation formulation; UV/Visible light curing; moderate adhesion; easy to remove; excellent protection during moderate-pressure blasting; See-Cure technology resin transitions from blue to pink upon sufficient exposure to light energy	45,000	D40	20%	3.9 [560]	8 seconds
<b>728-G</b>	Next generation formulation; UV/Visible light curing; high adhesion; easy removal after hot-water soak; superior product with excellent surface protection to aggressive chemical processes; high-visibility green color	25,000	D55	2.1%	83 [12,000]	10 seconds
<b>730-BT</b>	UV/Visible light curing; moderate adhesion; easy to remove; excellent surface protection and chemical resistance; trimmable after cure; high-visibility blue color	20,000	D35	0.3%	16 [2,444]	4 seconds
<b>731</b>	UV/Visible light curing; high adhesion; easy removal after hot-water soak; excellent surface protection to aggressive chemical processes; sprayable; high-visibility yellow color	18,000	D50	2.0%	86 [12,600]	15 seconds
<b>733</b>	UV/Visible light curing; easy removal after hot-water soak; excellent surface protection to aggressive chemical processes; sprayable	25,000	D50	2.7%	9 [1,320]	1 second

\*Cure time based upon DYMAX 5000-EC Light-Curing Flood Lamp System (200 mW/cm<sup>2</sup>)

## Chemical Processes – CHEMICAL MILLING

**S*****PEEDMASK***<sup>®</sup> resins provide superior surface protection during the chemical milling of turbine and other metal components.

***SpeedMask*** resins have been formulated with enhanced chemical resistance for reliable protection from strong acids and alkalis used in dissolving metal substrates during chemical milling. ***SpeedMask*** 730-BT can be trimmed to provide defined edge boundaries and accommodate the most complex and intricate components while still providing excellent protection with no leakage.

These resins were developed to withstand the typical 200°F+ Nitric Acid (HNO<sub>3</sub>) and Hydrofluoric Acid (HF) solutions used for the chemical milling of titanium components.

***SpeedMask*** resins were also developed to withstand typical Sodium Hydroxide (NaOH) and Potassium Hydroxide (KOH) solutions used for the chemical milling of aluminum components.

- Resins cure in seconds enabling faster processing, greater output, and lower processing costs
- Residue-free removal
- Applied by spraying, dipping, or coating



### ***SPEEDMASK***<sup>®</sup> Light-Curable Temporary Masking Resins for CHEMICAL MILLING Processes

Product	Features and Benefits	Nominal Viscosity, cP (20 rpm)	Shore Hardness	24-Hour Water Absorption	Modulus of Elasticity MPa [psi]	Cure Time *
<b>Peelable</b>						
<b>730-BT</b>	UV/Visible light curing; moderate adhesion; easy to remove; excellent surface protection and chemical resistance; trimmable after cure; high-visibility blue color	20,000	D35	0.3%	16 [2,444]	4 seconds

\*Cure time based upon DYMAX 5000-EC Light-Curing Flood Lamp System (200 mW/cm<sup>2</sup>)



Cure masked turbine blades in seconds in DYMAX conveyor

## Coatings – AIR PLASMA SPRAY - THERMAL BARRIER COATINGS

**S****PEEDMASK**<sup>®</sup> light-curable masking resins provide superior surface protection of turbine engine and structural components during thermal barrier coating processes, such as air plasma sprays.

**SpeedMask** resins have been formulated to be resistant to the aggressive force and heat of flame-spray processes. The cured maskant absorbs the energy from the force of plasma spray materials such as zirconium, molybdenum (used for thermal protection), tungsten carbide, or ceramics used for wear-resistant coatings. As the melted particles from the flame spray are deposited onto the substrate, the cured resin protects the surface underneath the protected area.

The aggressiveness of the flame-spray process and the adhesion needed to protect a substrate surface must be considered when choosing a masking resin. If a component substrate can accommodate incineration removal, a burn-off grade of **SpeedMask** resin would be appropriate for the process. If a substrate cannot withstand incineration, then a peelable mask would be a better choice.

- Resins cure in seconds enabling faster processing, greater output, and lower processing costs
- Residue-free removal
- Applied by spraying, dipping, or coating
- 

 **SPEEDMASK<sup>®</sup> Light-Curable Temporary Masking Resins for AIR PLASMA SPRAY - THERMAL BARRIER COATINGS**

Product	Features and Benefits	Nominal Viscosity, cP (20 rpm)	Shore Hardness	24-Hour Water Absorption	Modulus of Elasticity MPa [psi]	Cure Time *
<b>Burn-Off</b>						
<b>706</b>	UV light curing; high adhesion; superior protection to air plasma spray	43,000	D75	0.3%	830 [120,000]	20 seconds
<b>718</b>	UV/Visible light curing; high adhesion; resists flame spray processes; excellent surface and cavity protection during APS and HVOF; white in appearance	50,000	D80	3.9%	1,056 [153,278]	20 seconds
<b>Peelable</b>						
<b>726-SC</b>	Next generation formulation; UV/Visible light curing; moderate adhesion; easy to remove; excellent protection during moderate-pressure blasting; See-Cure technology resin transitions from blue to pink upon sufficient exposure to light energy	45,000	D40	20%	3.9 [560]	8 seconds
<b>728-G</b>	Next generation formulation; UV/Visible light curing; high adhesion; easy removal after hot-water soak; superior product with excellent surface protection to aggressive chemical processes; high-visibility green color	25,000	D55	2.1%	83 [12,000]	10 seconds
<b>731</b>	UV/Visible light curing; high adhesion; easy removal after hot-water soak; excellent surface protection to aggressive chemical processes; sprayable; high-visibility yellow color	18,000	D50	2.0%	86 [12,600]	15 seconds
<b>733</b>	UV/Visible light curing; easy removal after hot-water soak; excellent surface protection to aggressive chemical processes; sprayable	25,000	D50	2.7%	9 [1,320]	1 second

\*Cure time based upon DYMAX 5000-EC Light-Curing Flood Lamp System (200 mW/cm<sup>2</sup>)

## Coatings – PAINTING and POWDER COATINGS

**S***SPEEDMASK*<sup>®</sup> light-curable masking resins provide superior surface protection of metal and plastic turbine engine and structural components during paint- and powder-coating processes.

*SpeedMask* resins have been formulated to be resistant to the heat and chemical exposure during paint- and powder-coating processes.

Cured maskants are easily removed from the substrate following the completion of the process, leaving a residue-free surface.

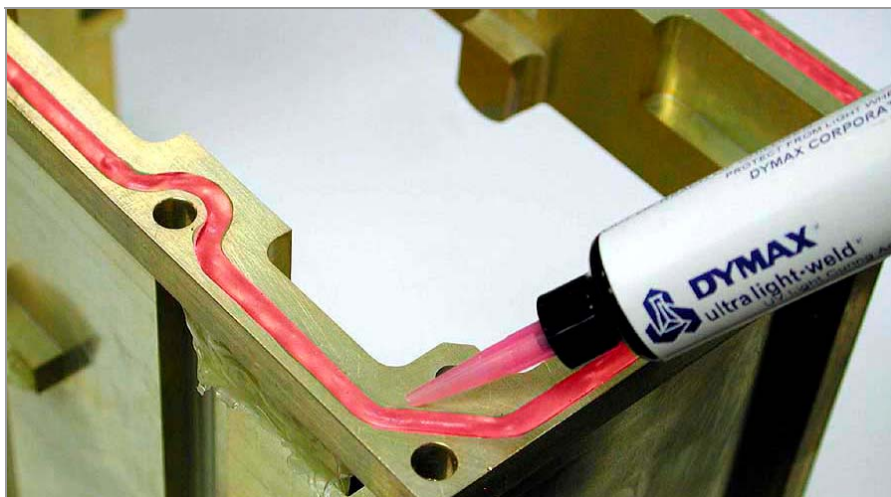
- Resins cure in seconds enabling faster processing, greater output, and lower processing costs
- Applied by spraying, dipping, or coating



### *SPEEDMASK*<sup>®</sup> Light-Curable Temporary Masking Resins for PAINTING and POWDER COATINGS

Product	Features and Benefits	Nominal Viscosity, cP (20 rpm)	Shore Hardness	24-Hour Water Absorption	Modulus of Elasticity MPa [psi]	Cure Time *
<b>Peelable</b>						
<b>726-SC</b>	Next generation formulation; UV/Visible light curing; moderate adhesion; easy to remove; excellent protection during moderate-pressure blasting; See-Cure technology resin transitions from blue to pink upon sufficient exposure to light energy	45,000	D40	20%	3.9 [560]	8 seconds

\*Cure time based upon DYMAX 5000-EC Light-Curing Flood Lamp System (200 mW/cm<sup>2</sup>)



*SPEEDMASK*<sup>®</sup> resins provide excellent surface protection

## Media Finishing – GRIT-BLASTING

**S****PEEDMASK**<sup>®</sup> light-curable masking resins provide superior surface protection of turbine and metal components during grit-blasting surface treatment.

**SpeedMask** resins have been developed to be resilient to sharp particles and the pressure used in blasting applications. The cured maskant provides reliable protection from sharp particles such as aluminum oxide, garnet, plastics, and organic media. The cured resin absorbs the energy from the air stream blast, while the media bounces off the masked surface, protecting the area underneath.

Selection of the best **SpeedMask** resin to use depends on the blast velocity (psi or bars), as well as the media particle size (grit). Another factor to consider is the surface texture of the component. Smooth surfaces require high-adhesion masks, while rough surfaces require lower adhesion masks.

- Cure in seconds enables faster processing, greater output, and lower processing costs
- Residue-free removal
- Applied by spraying, dipping, or coating



### **SPEEDMASK**<sup>®</sup> Light-Curable Temporary Masking Resins for GRIT BLASTING

Product	Features and Benefits	Nominal Viscosity, cP (20 rpm)	Shore Hardness	24-Hour Water Absorption	Modulus of Elasticity MPa [psi]	Cure Time *
<b>Peelable</b>						
<b>724</b>	Next generation formulation; UV/Visible light curing; low adhesion; good protection during low-pressure blasting; easy removal; clear in appearance	70,000	D40	24.0%	2.7 [390]	15 seconds
<b>726-SC</b>	Next generation formulation; UV/Visible light curing; moderate adhesion; easy to remove; excellent protection during moderate-pressure blasting; See-Cure technology resin transitions from blue to pink upon sufficient exposure to light energy	45,000	D40	20%	3.9 [560]	8 seconds
<b>728-G</b>	Next generation formulation; UV/Visible light curing; high adhesion; easy removal after hot-water soak; superior product with excellent surface protection to aggressive chemical processes; high-visibility green color	25,000	D55	2.1%	83 [12,000]	10 seconds
<b>730-BT</b>	UV/Visible light curing; moderate adhesion; easy to remove; excellent surface protection and chemical resistance; trimmable after cure; high-visibility blue color	20,000	D35	0.3%	16 [2,444]	4 seconds
<b>731</b>	UV/Visible light curing; high adhesion; easy removal after hot-water soak; excellent surface protection to aggressive chemical processes; sprayable; high-visibility yellow color	18,000	D50	2.0%	86 [12,600]	15 seconds
<b>733</b>	UV/Visible light curing; easy removal after hot-water soak; excellent surface protection to aggressive chemical processes; sprayable	25,000	D50	2.7%	9 [1,320]	1 second

\*Cure time based upon DYMAX 5000-EC Light-Curing Flood Lamp System (200 mW/cm<sup>2</sup>)

## Media Finishing – SHOT PEENING

**S****PEEDMASK**<sup>®</sup> light-curable masking resins provide superior surface protection of turbine and metal components during the shot-peening, plastic-deformation surface treatment process.

**SpeedMask** resins have been developed to be resistant to various peening media and the pressures used in peening applications. The cured maskant provides reliable protection from peening media particles, such as cut wire, round metal or ceramic particles, and glass beads. The cured resin absorbs the energy from the ball-peen hammer effect of the media blast, while the media bounces off the masked surface, protecting the area underneath.

Selection of the best **SpeedMask** masking resin to use depends on the shot velocity (psi or bars), as well as the media type and particle size. Another factor to consider is the surface texture of the component. Smooth surfaces require high-adhesion masks, while rough surfaces require lower-adhesion masks.

- Resins cure in seconds enabling faster processing, greater output, and lower processing costs
- Residue-free removal
- Applied by spraying, dipping, or coating



### **SPEEDMASK**<sup>®</sup> Light-Curable Temporary Masking Resins for SHOT PEENING

Product	Features and Benefits	Nominal Viscosity, cP (20 rpm)	Shore Hardness	24-Hour Water Absorption	Modulus of Elasticity MPa [psi]	Cure Time *
<b>Peelable</b>						
<b>724</b>	Next generation formulation; UV/Visible light curing; low adhesion; good protection during low-pressure blasting; easy removal; clear in appearance	70,000	D40	24.0%	2.7 [390]	15 seconds
<b>726-SC</b>	Next generation formulation; UV/Visible light curing; moderate adhesion; easy to remove; excellent protection during moderate-pressure blasting; See-Cure technology resin transitions from blue to pink upon sufficient exposure to light energy	45,000	D40	20%	3.9 [560]	8 seconds
<b>728-G</b>	Next generation formulation; UV/Visible light curing; high adhesion; easy removal after hot-water soak; superior product with excellent surface protection to aggressive chemical processes; high-visibility green color	25,000	D55	2.1%	83 [12,000]	10 seconds
<b>730-BT</b>	UV/Visible light curing; moderate adhesion; easy to remove; excellent surface protection and chemical resistance; trimmable after cure; high-visibility blue color	20,000	D35	0.3%	16 [2,444]	4 seconds
<b>731</b>	UV/Visible light curing; high adhesion; easy removal after hot-water soak; excellent surface protection to aggressive chemical processes; sprayable; high-visibility yellow color	18,000	D50	2.0%	86 [12,6000]	15 seconds
<b>733</b>	UV/Visible light curing; easy removal after hot-water soak; excellent surface protection to aggressive chemical processes; sprayable	25,000	D50	2.7%	9 [1,320]	1 second

\*Cure time based upon DYMAX 5000-EC Light-Curing Flood Lamp System (200 mW/cm<sup>2</sup>)

## Media Finishing – VIBRATORY FINISHING

**S****PEEDMASK**<sup>®</sup> light-curable masking resins provide reliable surface protection of intricate and complex configurations during vibratory finishing operations such as slurry, tumbling, or deburring.

**SpeedMask** resins have been formulated to withstand the compound solution (soap, water, or alternative cleaning/polishing agents) and abrasion from ceramic, plastic, or steel media while vibrating during the finishing process.

Selecting the best **SpeedMask** masking resin to use depends on the amount of adhesion needed to protect the surface underneath the mask during the process. The stronger the vibration or abrasion is, the higher the adhesion of the maskant needs to be for reliable protection.

- Resins cure in seconds enabling faster processing, greater output, and lower processing costs
- Residue-free removal
- Applied by spraying, dipping, or coating



### **SPEEDMASK**<sup>®</sup> Light-Curable Temporary Masking Resins for VIBRATORY FINISHING

Product	Features and Benefits	Nominal Viscosity, cP (20 rpm)	Shore Hardness	24-Hour Water Absorption	Modulus of Elasticity MPa [psi]	Cure Time *
<b>Peelable</b>						
<b>724</b>	Next generation formulation; UV/Visible light curing; low adhesion; good protection during low-pressure blasting; easy removal; clear in appearance	70,000	D40	24.0%	2.7 [390]	15 seconds
<b>726-SC</b>	Next generation formulation; UV/Visible light curing; moderate adhesion; easy to remove; excellent protection during moderate-pressure blasting; See-Cure technology resin transitions from <b>blue</b> to <b>pink</b> upon sufficient exposure to light energy	45,000	D40	20%	3.9 [560]	8 seconds
<b>728-G</b>	Next generation formulation; UV/Visible light curing; high adhesion; easy removal after hot-water soak; superior product with excellent surface protection to aggressive chemical processes; high-visibility <b>green</b> color	25,000	D55	2.1%	83 [12,000]	10 seconds
<b>730-BT</b>	UV/Visible light curing; moderate adhesion; easy to remove; excellent surface protection and chemical resistance; trimmable after cure; high-visibility <b>blue</b> color	20,000	D35	0.3%	16 [2,444]	4 seconds

\*Cure time based upon DYMAX 5000-EC Light-Curing Flood Lamp System (200 mW/cm<sup>2</sup>)

## Parts Handling – GENERAL MASKING

**S***SPEEDMASK*<sup>®</sup> light-curable masking resins provide superior surface protection of turbine and metal components from FOD (foreign object damage) during the manufacturing process, handling, and transportation.

- Resins cure in seconds enabling faster processing, greater output, and lower processing costs
- Residue-free removal
- Applied by spraying, dipping, or coating



### *SPEEDMASK*<sup>®</sup> Light-Curable Temporary Masking Resins for GENERAL MASKING

Product	Features and Benefits	Nominal Viscosity, cP (20 rpm)	Shore Hardness	24-Hour Water Absorption	Modulus of Elasticity MPa [psi]	Cure Time *
<b>Peelable</b>						
<b>726-SC</b>	Next generation formulation; UV/Visible light curing; moderate adhesion; easy to remove; excellent protection during moderate-pressure blasting; See-Cure technology resin transitions from blue to pink upon sufficient exposure to light energy	45,000	D40	20%	3.9 [560]	8 seconds
<b>728-G</b>	Next generation formulation; UV/Visible light curing; high adhesion; easy removal after hot-water soak; superior product with excellent surface protection to aggressive chemical processes; high-visibility green color	25,000	D55	2.1%	83 [12,000]	10 seconds
<b>730-BT</b>	UV/Visible light curing; moderate adhesion; easy to remove; excellent surface protection and chemical resistance; trimmable after cure; high-visibility blue color	20,000	D35	0.3%	16 [2,444]	4 seconds

\*Cure time based upon DYMAX 5000-EC Light-Curing Flood Lamp System (200 mW/cm<sup>2</sup>)

## Manufacturing Aids – MACHINING

**S***SPEEDMASK*<sup>®</sup> light-curable masking resins provide excellent protection during machining (milling, grinding, turning) of turbine and metal components.

The durability of the cured resins allow the maskants to be machined through, without any lifting of the remaining masks, while continuing to provide reliable protection of the masked surfaces.

*SpeedMask* temporary masking resins can withstand various water-soluble and oil-based coolants used in machining.

- Resins cure in seconds enabling faster processing, greater output, and lower processing costs
- Residue-free removal
- Applied by spraying, dipping, or coating



### *SPEEDMASK*<sup>®</sup> Light-Curable Temporary Masking Resins for MACHINING

Product	Features and Benefits	Nominal Viscosity, cP (20 rpm)	Shore Hardness	24-Hour Water Absorption	Modulus of Elasticity MPa [psi]	Cure Time *
<b>Burn-Off</b>						
<b>729</b>	Next generation formulation; UV/Visible light curing; high adhesion to nickel super alloys; resists acids and alkalis; hard/durable	20,000	D70	0.4%	240 [35,000]	30 seconds
<b>Peelable</b>						
<b>733</b>	UV/Visible light curing; easy removal after hot-water soak; excellent surface protection to aggressive chemical processes; sprayable	25,000	D50	2.7%	9 [1,320]	1 second

\*Cure time based upon DYMAX 5000-EC Light-Curing Flood Lamp System (200 mW/cm<sup>2</sup>)

## Manufacturing Aids – AIRFLOW TESTING

**S***SPEEDMASK*<sup>®</sup> light-curable masking resins provide excellent sealing of cooling holes and cavities during cold airflow testing of coated and uncoated turbine components.

The durability, flexibility, and adhesion of cured *SpeedMask* temporary masking resins allows for complete sealing of the cooling holes and core cavities, for either row-by-row or mass airflow testing.

The cured maskants also provide complete sealing, preventing air leaks during pressurized flow, leak, and duration testing.

- Resins cure in seconds enabling faster processing, greater output, and lower processing costs
- Residue-free removal
- Applied by spraying, dipping, or coating



### *SPEEDMASK*<sup>®</sup> Light-Curable Temporary Masking Resins for AIRFLOW TESTING

Product	Features and Benefits	Nominal Viscosity, cP (20 rpm)	Shore Hardness	24-Hour Water Absorption	Modulus of Elasticity MPa [psi]	Cure Time *
<b>Peelable</b>						
<b>724</b>	Next generation formulation; UV/Visible light curing; low adhesion; good protection during low-pressure blasting; easy removal; clear in appearance	70,000	D40	24.0%	2.7 [390]	15 seconds

\*Cure time based upon DYMAX 5000-EC Light-Curing Flood Lamp System (200 mW/cm<sup>2</sup>)



Apply resin to cooling holes



Remove cured resin by peeling

## Light Curing Systems – FOR **SPEEDMASK®** TEMPORARY MASKING RESINS

Successful light-cure processing demands that the curing equipment be matched to the resin to optimize both performance and cost savings. DYMAX manufactures both light-curable resins and light-curing equipment, and specializes in optimization of UV-curing processes.

Our technical specialists are ready to help you optimize your process, and maximize your profit and product performance. For resin and equipment selection assistance, please call the DYMAX Applications Engineering Department.



**5000 UV Light-Curing Flood Lamp Systems** with shutter and protective enclosure. Ideal for single-component or batch-curing processes requiring moderate intensity and a 5" x 5" (12.7 cm x 12.7 cm) cure area. **CE Marked PC Series Flood Systems** available for European production facilities.



**BlueWave® LED Prime UVA Light-Curing Spot Lamp** Unit generates high-intensity curing energy with LEDs so there are no bulbs to change, cool cures, no warm-up, and constant intensity for thousands of hours. **CE Marked.**



**ACCU-CAL™ 50 Radiometers** are perfect for process monitoring of spot and flood UV light-curing systems. **CE Marked.**



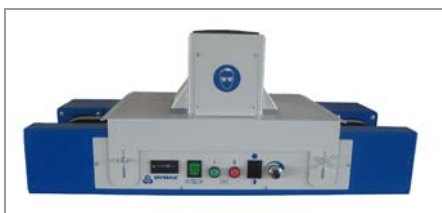
**BlueWave® 200 UV Light-Curing Spot Lamp** with patent pending intensity adjustment feature provides high-intensity UV/visible light in a concentrated area. Ideal for integration with automated equipment and multiple output lightguides. **CE Marked.**



**Lightguide Stand Keeps Lightguide Stationary.** Log onto [www.dymax.com](http://www.dymax.com) for more information on this and other DYMAX light-curing equipment accessories.



**UVCS UV Light-Curing Conveyor Systems** Ideal for providing consistent curing for high-volume and high-speed assembly. **CE Marked.**



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