Chemical Resistance

For a lifetime of protection.

LEGEND
1 immersion, constant flow or vapor
2 incidental spill or splash
3 fumes only
NR not recommended
-- Contact Raven for more information

This guide is intended as an aid in determining potential use of AquataPoxy, Raven, and AquataFlex products as protective coatings against chemical exposure. Each application should be evaluated according to its own conditions.

	AquataPoxy					Raven					AquataFlex		
	A6	A7	A10	A61	HB	404	405	400S	415	470	F-1	F-2	F-3
Acetic Acid, 5%	NR	NR	NR	--	2	2	2	1	2	1	2	2	2
Acetic Acid, 10%	NR	NR	NR	--	NR	NR	3	1	2	1	NR	NR	NR
Acetic Acid, 20%	NR	NR	NR	--	NR	NR	3	2	2	2	NR	NR	NR
Acetone	2	2	NR	2	--	2	2	2	2	1	2	2	2
Ammonium Hydroxide, 1%	1	1	--	1	1	1	1	1	1	1	1	1	1
Ammonium Hydroxide, 5%	1	1	--	1	1	1	1	1	1	1	2	2	2
Benzene	2	2	--	2	2	2	2	2	2	1	2	2	2
Bleach	1	--	--	1	1	--	1	1	--	1	2	2	2
Chromic Acid, 15%	--	--	--	--	--	--	--	2	--	1	--	--	--
Citric Acid, 10%	1	2	--	1	1	1	1	1	1	1	--	--	--
Deionized Water	1	1	1	1	1	1	1	1	1	1	1	1	2
Detergent Solution (0.025%)	1	1	1	1	1	1	1	1	1	1	1	1	2
Distilled Water	1	1	1	1	1	1	1	1	1	1	1	1	2
Ethanol	1	2	--	2	--	1	2	1	--	2	2	2	2
Ferric Chloride, 1%	1	2	--	1	1	1	1	1	1	1	--	--	--
Ferric Sulfate, 10%	1	2	--	1	--	1	1	1	--	--	--	--	--
Gasoline, Jet Fuel	1	--	--	--	2	--	--	--	--	--	2	2	2
Gasoline, Unleaded	1	2	--	--	2	1	1	1	--	--	2	2	2
Grape Juice	2	--	--	--	2	2	2	--	--	--	--	--	--
Heptane	1	--	--	--	2	1	1	--	--	--	--	--	--
Hexane	1	--	--	--	2	1	1	--	--	--	--	--	--
Hydraulic Fluid	1	2	--	--	--	1	1	1	1	1	2	2	2
Hydrochloric Acid, 10%	2	2	3	2	2	1	1	1	2	1	--	--	--
Hydrochloric Acid, 20%	2	2	--	--	--	2	2	1	--	1	--	--	--
Hydrochloric Acid, 37%	--	--	--	--	--	--	2	1	--	1	--	--	--
Hydrogen Peroxide Solution, 3%	1	--	--	--	--	1	1	--	--	--	--	--	--
Kerosene	1	--	--	1	2	1	1	1	--	--	2	2	2
Lactic Acid, 10%	2	--	--	--	--	2	2	1	--	2	NR	NR	NR
Lactic Acid, 5%	1	--	--	--	--	1	1	1	--	2	2	2	2
Methanol	2	--	--	2	--	--	2	2	--	1	NR	NR	NR

11/02

Chemical Resistance

RAVEN® LINING SYSTEMS

For a lifetime of protection.

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1 immersion, constant flow or vapor
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This guide is intended as an aid in determining potential use of AquataPoxy, Raven, and AquataFlex products as protective coatings against chemical exposure. Each application should be evaluated according to its own conditions.

	AquataPoxy					Raven					AquataFlex		
	A6	A7	A10	A61	HB	404	405	400S	415	470	F-1	F-2	F-3
Methylene Chloride	--	--	--	--	--	--	NR	2	--	1	--	--	--
Methyl-Ethyl Ketone	2	2	NR	2	--	2	2	2	2	1	2	2	2
Mineral Spirits	1	--	--	--	2	1	--	--	--	1	2	2	2
Nitric Acid, 5%	2	2	--	2	--	--	1	1	--	1	--	--	--
Nitric Acid, 10%	2	2	--	--	--	--	1	1	--	2	NR	NR	NR
Nitric Acid, 40%	--	--	--	--	--	--	--	2	--	3	NR	NR	NR
Oil, Motor	1	--	--	1	1	1	1	--	--	1	2	2	2
Oil, Vegetable	1	--	--	1	1	1	1	--	--	1	1	1	2
Oleic Acid	--	--	--	--	--	--	1	1	--	1	--	--	--
Phenol Solution, 5%	--	--	--	--	--	--	--	--	--	1	--	--	--
Phosphoric Acid, 10%	3	NR	--	--	2	--	1	1	--	1	NR	NR	NR
Phosphoric Acid, 85%	NR	NR	--	--	NR	--	2	1	--	2	NR	NR	NR
Potassium Hydroxide, 10%	1	1	--	1	1	1	1	1	--	1	2	2	2
Salt Brine	1	1	2	1	1	1	1	--	--	1	1	1	2
Skydrol	1	--	--	--	1	--	1	1	--	1	--	--	--
Soap Solution, 1%	1	1	2	1	1	1	1	1	1	1	1	1	2
Sodium Chloride	1	1	2	1	1	1	1	1	1	1	1	1	1
Sodium Hydroxide Solution, 10%	1	1	--	2	1	1	1	1	--	1	2	2	2
Sodium Hydroxide Solution, 50%	--	--	--	--	2	--	2	1	--	2	--	--	--
Sodium Hypochlorite Solution, 3%	2	NR	--	2	2	1	1	1	--	1	--	--	--
Sulfuric Acid, 10%	1	2	2	2	1	1	1	1	--	1	2	2	2
Sulfuric Acid, 25%	2	2	--	2	2	1	1	1	--	1	NR	NR	NR
Sulfuric Acid, 50%	NR	--	--	--	NR	--	--	1	--	1	NR	NR	NR
Sulfuric Acid, 98%	NR	--	--	--	NR	--	NR	1	--	2	NR	NR	NR
Tetrachloroethane	2	--	--	--	--	--	--	2	--	1	--	--	--
Toluene	2	--	3	2	--	--	2	2	--	1	--	--	--
Trichlorethane	2	--	--	--	--	--	--	--	--	1	--	--	--
Water, distilled	1	1	1	1	1	1	1	1	1	1	1	1	2
Xylene	1	--	--	2	2	--	1	2	--	1	2	NR	NR

RAVEN LINING SYSTEMS • www.ravenlining.com
1024 North Lansing Avenue • Tulsa, OK 74106 • 800-324-2810 • 918-584-2810 • Fax: 918-582-4311 • email: contact@ravenlining.com

Tulsa Materials
3100 North Hemlock Circle
Broken Arrow, OK 74012-1115 USA

SHERRYLaboratories

Testing Today – Protecting Tomorrow®

Tel: 918-258-6066
800-982-8378
Fax: 918-258-1154

LABORATORY REPORT

Attn: David Stanley
Cohesant Materials, Inc.
13105 East 61st Street South, Suite A
Tulsa, OK 74012

Report No.: 06080703-003 v2-Amended
Date Received: 8/23/2006
Date Reported: 9/01/2006
P.O. No.: 314940

Sample Description: Raven 405

COMPRESSION TEST (ASTM D 695-02a)

Specimen preparation: Cylinders, tested as submitted
Pre-test Conditioning: None (waived)

Specimen Number	Diameter (inches)	Area (Sq. in)	Peak Load (lbs)	Peak Stress (psi)
1	0.607	0.289	5,349	18,500
2	0.608	0.290	5,453	18,800
3	0.606	0.288	5,486	19,000
4	0.607	0.289	5,531	19,100
5	0.607	0.289	5,523	19,100
6	0.606	0.288	5,564	19,300
Average	**0.607**	**0.289**	**5,484**	**19,000**

[1]Amended-Sample and page number, 9/7/06.

Approved by: _____
Jeffrey Simmons, Manager of Mechanical Testing
Sherry Laboratories

Tulsa Materials
3100 North Hemlock Circle
Broken Arrow, OK 74012-1115 USA

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LABORATORY REPORT

Attn: David Stanley
Cohesant Materials, Inc.
13105 East 61st Street South, Suite A
Tulsa, OK 74012

Report No.: 06080703-002 v2-Corrected
Date Received: 8/23/2006
Date Reported: 9/01/2006
P.O. No.: 314940

Sample Description: Raven 405

FLEXURAL TEST (ASTM D 790-03)

Specimen preparation: Tested as submitted
Pre-test Conditioning: None (waived)
Span: 2 inches
Test Temperature: 25C
Test Rate: 0.1 in/min

Specimen Number	Width (in.)	Thickness (in.)	Peak Load (lbs.)	Peak Stress[1] (psi)	Modulus[1] (psi)
1	0.487	0.093	19.67	14,000	726,000
2	0.486	0.096	21.96	14,700	750,300
3	0.487	0.097	22.21	14,500	731,000
4	0.490	0.095	19.68	13,300	716,000
5	0.488	0.100	24.36	14,900	724,000
6	0.491	0.098	23.90	15,200	717,000
Average	**0.488**	**0.965**	**21.96**	**14,400**	**727,000**

[1]Corrected-Test results, sample and page number, 9/7/06.

Approved by: _____
Jeffrey Simmons, Manager of Mechanical Testing
Sherry Laboratories

Tulsa Materials
3100 North Hemlock Circle
Broken Arrow, OK 74012-1115 USA

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800-982-8378
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LABORATORY REPORT

Attn: David Stanley
Cohesant Materials, Inc.
13105 East 61st Street South, Suite A
Tulsa, OK 74012

Report No.: 06080703-001 v2-Corrected
Date Received: 8/23/2006
Date Reported: 9/01/2006
P.O. No.: 314940

Sample Description: Raven 405

TENSILE TEST (ASTM D 638-03)

Specimen preparation: Tested as submitted
Pre-test Conditioning: None (waived)

Specimen Number	Width (inches)	Thickness (inches)	Area (Sq. in)	Peak Load (lbs)	Peak Stress (psi)	Elongation[1] (%)
1	0.486	0.095	0.0462	354	7,670	1.4
2	0.485	0.096	0.0466	377	8,100	1.5
3	0.486	0.101	0.0491	413	8,400	1.6
4	0.488	0.095	0.0464	354	7,600	1.4
5	0.486	0.093	0.0452	382	8,400	1.8
6	0.487	0.099	0.0482	416	8,600	1.6
Average	**0.486**	**0.096**	**0.0470**	**383**	**8,200**	**1.6**

[1]Corrected-Test results, sample and page number, 9/7/06.

Approved by: _____
Jeffrey Simmons, Manager of Mechanical Testing
Sherry Laboratories

Non-Metallics
6825 E. 38th St.
Tulsa, OK 74145

SHERRY LABORATORIES
MIDSTATES
INDIANA OKLAHOMA LOUISIANA

Tel: (918) 664-7768
Fax: (918) 664-5680
800-324-8378

LABORATORY REPORT

Attn: David Stanley
Raven Lining Systems
1024 North Lansing
Tulsa, OK 74106

Report No: 2000070105
Date Received: 07/07/2000
Date Reported: 07/11/2000
P.O. No: P 312416

Description: Raven 405.

TABER ABRASION TEST REPORT

Test Method: ASTM D4060-95
Pre-test Conditioning: None
Type of Wheel: CS17
Load/Wheel: 1000g
Speed: 70 rpm
Test Duration: 1000 cycles
Test Results:

Panel No.	Weight loss after 1,000 cycles, mg	Weight loss, %
1	78.8	0.16

Approved by _____
Dan M. Lawson, Director
Non-Metallic Testing

"REDNER REPORT"
LOS ANGELES COUNTY SANITATION DISTRICTS COATING EVALUATION STUDY

The County of Los Angeles Sanitation Districts conducting an evaluation of protective coatings since 1985-86. John A. Redner, Edward Esfandi and Randolph Hsi are among those responsible for the original report and evaluation process. The Districts had utilized many different types of protective systems over the years to protect concrete structures from the corrosive effects of the sanitary sewer environment. Unfortunately many of the protective systems had failed, in fact only PVC liners exhibited any degree of success at the beginning of this evaluation. The focus of the evaluation was to evaluate protective coatings applied to corroded and uncorroded concrete. The purpose of the evaluation as to develop a list of suitable coatings and specifications for their application on new and rehabilitation projects.

The evaluation is conducted in precast concrete tanks (3' diameter x 2.5' deep). There is an inner and outer tank with the annular space being filled with water to simulate moisture from groundwater. The lower half of the inside tank is permitted to corrode for 6-8 weeks using a 10% sulfuric acid solution. Approximately 1" of corrosion typically results. This rate of corrosion is estimated at 15-20 times the highest rate of corrosion expected in actual service. After sufficient aggregate and even some reinforcing steel has been exposed, the coating manufacturer prepares and coats the corroded and uncorroded surfaces. 48 hours after the coating application, the tank is filled with water. 96 hours after application, concentrated sulfuric acid is added to the water for a final 10% acid concentration. The solution is drained and refilled on a quarterly basis for interim inspection. After one year the acid solution is removed and the evaluation is completed. The coatings are evaluated under three criteria: application, acid resistance and bonding characteristics. Over 60% of the coatings tested failed!

AquataPoxy and Raven coatings were tested and successfully passed this widely recognized evaluation. A full copy of the report is available upon request.

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1 Workman Mill Road, Whittier, CA 90601-1998
ng Address: P.O. Box 4998, Whittier, CA 90607-4998
Phone: (310) 699-7411, FAX: (310) 695-6139

CHARLES W. CARRY
Chief Engineer and General Manager

February 22, 1994

Evaluation of Raven 405 Epoxy Coating for Concrete Protective Characteristics

Raven Chemicals' Raven 405 epoxy coating system was evaluated for its concrete protective characteristics in the Districts Concrete Coating and Liner Testing facilities in Compton for approximately one year of acid service. The coating system was well bonded to the concrete substrate. No indication of corrosion to the liner or the underlying concrete was observed.

As a result of this evaluation, Raven Chemicals' Raven 405 epoxy coating system will be included as an alternative coating product in specifications that we prepare in the future for concrete coating systems. Information contained in this letter is not for publication or advertisement. No endorsement is intended for this coating system. Prior written approval of the Sanitation Districts is required for any advertisement or promotion that involves this agency.

Thank you for your continued cooperation and interest in the Districts' evaluation program for concrete coatings. If you have any questions or need additional information, please contact Edward Esfandi at (310) 638-1161 ext. 222.

Very truly yours

Charles W. Carry

Edward J. Esfandi
Senior Engineer

EE:lg

EVALUATION OF PROTECTIVE COATINGS FOR CONCRETE

John A. Redner, Sewerage System Superintendent, Randolph P. Hsi, Associate Engineer,
Edward J. Esfandi, Senior Engineer

February, 1994

County Sanitation Districts of Los Angeles County, Whittier California

INTRODUCTION

Concrete is the most widely used construction material in wastewater collection and treatment systems. Unfortunately, significant corrosion can occur to unprotected concrete when sulfide generation in wastewater is not controlled. Sources of sulfide in wastewater includes: unregulated and/or uncontrolled industrial discharges, degradation of sulfur containing organic matter, or the microbiological reduction of sulfate or other oxidized forms of sulfur. The construction of regional collection and treatment systems has increased wastewater travel time in collection systems, culminating in anaerobic wastewater and consequently increased sulfide generation. Odors from manholes or wastewater treatment facilities create significant nuisance problems for most agencies. A major cause of odors is hydrogen sulfide, a gas detectable at extremely low concentrations. Hydrogen sulfide is notorious for its toxicity, as well as its ability to corrode a number of materials used in construction of sewers and treatment plants, including concrete. Concrete corrosion is caused by the aerobic microbial oxidation of hydrogen sulfide to sulfuric acid and the subsequent chemical reaction of the acid with the cement binder in the concrete. Most agencies are particularly sensitive to the nuisances created by the odor releases. Many agencies are often unaware of the significant corrosion occurring to their concrete facilities.

The County Sanitation Districts of Los Angeles County (Districts) have utilized different types of protective systems over the years to minimize concrete corrosion. In the mid 1920's the use of vitrified clay liner plates in the construction of large poured-in-place concrete sewers and inlet facilities proved unsuccessful. By the mid 1960's many epoxy coating systems were being tried. Inspections have documented coating failure wherever exposure to significant sulfuric acid attack occurred. Often any application flaws or coating failures are not easily noticed for several years. In the past ten years a considerable amount of marketing has developed for high solids, fast cure coating systems. First hand experiences with these coating systems have resulted in widely different opinions from different agencies. One agency reports nothing but success, while another reports nothing but failure. Figure 1a and 1b illustrate the failure that occurred, after only 2 years of service, to a urethane coating applied to a drop manhole.

The only protective coating system that has developed any degree of success has been the application of polyvinyl chloride liners to concrete surfaces during construction. While this has become a standard specification for the Districts for new concrete construction, many questions remain concerning the best method and materials for rehabilitating existing corroded concrete structures. Many rehabilitation projects do not allow sufficient "down" time for conventional concrete surface repairs, using cementatious materials, followed by the application of liners. The application of a coating system that bonds to concrete and provides protection from microbial sulfuric acid would have wide application in the wastewater industry.

TESTING AND CERTIFICATION

Hydrostatic Head, Chemical Resistance and Adhesion Strength

Very few coatings routinely submit themselves for tough third party testing, much less pass the tests while setting standards that are unsurpassed. However, Aquatapoxy and Raven products are continually submitted and tested in industry recognized third party evaluations and testing. These photos are from a current study being conducted through the University of Houston in conjunction with the City of Houston. The testing objective is to evaluate whether or not coating products can be applied to damp concrete and withstand corrosive environments generally found in sewers. The coatings are applied to RCP while they are subjected to over 30' of hydraulic head pressure. AquataPoxy and Raven were also successfully tested for chemical attack and bond strength to dry and damp concrete and brick surfaces. Aquatapoxy and Raven have also successfully passed the industry recognized coating evaluation study conducted by the Los Angeles County Sanitation District.

Aquatapoxy A-6 and A-7 products also hold ANSI/NSF 61 certification for potable water applications and are acceptable under FDA and USDA guidelines for incidental food contact.

CITY OF LOS ANGELES
CALIFORNIA

JAMES K. HAHN
MAYOR

DEPARTMENT OF
PUBLIC WORKS

BUREAU OF
ENGINEERING

VITALY B. TROYAN, P.E.
CITY ENGINEER

650 SOUTH SPRING ST., SUITE 200
LOS ANGELES, CA 90014-1911

April 30, 2003

Joanne Hughes, Vice President
Raven Lining Systems
1024 North Lansing
Tulsa, Oklahoma 74106

Dear Ms. Hughes:

Re: CHEMICAL RESISTANCE TESTING OF RAVEN 405 EPOXY LINING

Attached is Lab No. 2003-514-91, dated April 10, 2003, showing the results of chemical resistance testing for the above maintenance hole product. The lining system responded to chemical exposure as follows:

Weight change: ***Excellent***
Hardness change: ***Excellent***
Tensile strength change: ***Excellent***
Elongation: ***Satisfactory****, with reactions to sulfuric acid, nitric acid, ferric chloride, detergent, biological and bleach exposures and a notable reaction to sodium hydroxide and ammonium hydroxide exposures.*

The lining system is identified as follows:

Trade Name:	*Raven 405*
Approved Use:	*Sanitary Sewer Maintenance Rehabilitation*
Installation:	*SSPWC Section 500-2 as modified by City of Los Angeles Brownbook*
Resin:	*Blue-colored solid epoxy*

The overall summary is that this material **passed** SSPWC Section 210-2.3 Chemical Resistance Test. To complete the evaluation process, a trail demonstration must be arranged where we may observe and verify an installation of the system. If you have any questions, please call me at (213)847-8776.

Sincerely,

Hugh S. Lee, Group Manager
Design Standards and Investigations Group
650 S. Spring Street, Suite 400
Los Angeles, California 90014-1913

HSL:hl/raven4.wpd

Attachment (Lab No. 2003-514-91)

Chemical Resistance Test of
Raven Lining Systems
Raven 405 Blue
Epoxy Resin

Project Title: Maintenance Shaft & Sewer Rehabilitation
Project Number: BD001748
Engineer: Hugh Lee
Source: Raven Lining Systems
Date Received: 10/16/2002
Specification: SSPWC 210-2.3.3, 1997
Description: Raven 405 Blue Epoxy Resin

SOLUTION	RESULTS CONDITIONED WEIGHT CHANGE % maximum Days Immersion				REQUIREMENTS CONDITIONED WEIGHT CHANGE %
	28	56	84	112	
Sulfuric Acid, 20%	0.2239	0.3685	0.6617	0.6543	
Sodium Hydroxide, 5%	-0.0435	0.0532	0.1263	0.1700	
Ammonium Hydroxide, 5%	0.0231	0.1234	0.2410	0.2754	**All Solutions**
Nitric Acid, 1%	0.0706	0.1708	0.3070	0.3531	
Ferric Chloride, 1%	0.0382	0.1305	0.2120	0.2824	**and Periods**
Soap, 0.1%	0.0351	0.1289	0.2087	0.2865	
Detergent, 0.1%	0.0222	0.1260	0.2322	0.2694	**± 1.5% max**
BOD, ≥ 700ppm	0.0230	0.1314	0.2179	0.2889	
Bleach, 1%	-0.0580	-0.0988	-0.3358	0.2835	
Sodium Hydroxide Buffer to PH 10	0.0203	0.1313	0.2182	0.2703	

Chemical Resistance Test of
Raven Lining Systems
Raven 405 Blue
Epoxy Resin

Project Title: Maintenance Shaft & Sewer Rehabilitation
Project Number: BD001748
Engineer: Hugh Lee
Source: Raven Lining Systems
Date Received: 10/16/2002
Specification: SSPWC 210-2.3.3, 1997
Description: Raven 405 Blue Epoxy Resin

SOLUTION	RESULTS CONDITIONED HARDNESS CHANGE maximum 112 Days Immersion	REQUIREMENTS
Sulfuric Acid, 20%	1	For Information Only
Sodium Hydroxide, 5%	1	
Ammonium Hydroxide, 5%	2	
Nitric Acid, 1%	2	
Ferric Chloride, 1%	1	
Soap, 0.1%	-1	
Detergent, 0.1%	-3	
BOD, ≥ 700ppm	2	
Bleach, 1%	-1	
Sodium Hydroxide Buffer to PH 10	-1	
PHYSICAL PROPERTY	*INITIAL RESULTS*	
Hardness, Shore "D" ASTM D2240	85	For Information Only

Chemical Resistance Test of
Raven Lining Systems
Raven 405 Blue
Epoxy Resin

Project Title: Maintenance Shaft & Sewer Rehabilitation
Project Number: BD001748
Engineer: Hugh Lee
Source: Raven Lining Systems
Date Received: 10/16/2002
Specification: SSPWC 210-2.3.3, 1997
Description: Raven 405 Blue Epoxy Resin

SOLUTION	RESULTS		REQUIREMENTS
	Tensile Strength, psi	Elongation %	
	112 Days Immersion		
Sulfuric Acid, 20%, Type I	8,974	1.7	For Information Only
Sodium Hydroxide, 5%, Type I	8,752	2.1	
Ammonium Hydroxide, 5%, Type I	8,428	1.8	
Nitric Acid, 1%, Type I	8,698	1.7	
Ferric Chloride, 1%, Type I	8,907	1.8	
Soap, 0.1%, Type I	8,615	1.6	
Detergent, 0.1%, Type I	8,568	1.7	
BOD, ≥ 700ppm, Type I	8,668	1.7	
Bleach, 1%, Type I	8,395	1.7	
Sodium Hydroxide Buffer to PH 10, Type I	8,540	1.7	
PHYSICAL PROPERTIES	*INITIAL RESULTS*		
Initial Tensile Strength, psi	9,034		For Information Only
Initial Elongation, %	1.5		

Chemical Resistance

Raven 405 coating has been immersion tested for a minimum of six (6) months according to ASTM D543 (modified) Standard Practices for Evaluating the Resistance of Plastics to Chemical Reagents. The results indicate classification of Raven 405 as being suitable for constant immersion duty in the following reagents:

- Water
- Nitric Acid, 5%
- Phosphoric Acid, 10%
- Sulfuric Acid, 20%
- Sodium Hydroxide, 10%
- Unleaded Gasoline
- Vegetable Oil
- Detergent Solution, 0.1%
- Soap Solution, 0.1%

During the course of testing, none of the specimens exhibited weight loss, spalling, cracking or blistering. Immersion samples are “free” coatings without concrete or brick substrates, immersing over twice the area that would normally see service. Color change was a very slight orange surface coloration for the sample immersed in Nitric Acid and a slight darkening of the sample immersed in the Sulfuric Acid. No degradation was experienced.

For additional chemical resistance performance of Raven 405, see the Raven Chemical Resistance Chart or contact Raven with project details at 800-324-2810.