## ADDENDUM NO. 3

### COUNTY OF KAUA'I DEPARTMENT OF WATER

### PLANS, BID PROPOSAL, SPECIFICATIONS CONTRACT AND BOND FOR

### JOB NO. 17-10, WP2020 #KW-07 Rehabilitate Paua Valley Tank No. 1, 0.5 MG Concrete Kekaha Water System Kekaha, Kaua'i, Hawai'i

#### NOTICE TO PROSPECTIVE PROPOSERS

This addendum is hereby made a part of the PLANS, BID PROPOSAL, SPECIFICATIONS, CONTRACT AND BOND for the subject project and it shall amend the said contract documents in the following respects:

#### Item 1

Department's Responses to Questions / Comments / Material Substitutions.

### End of Addendum No. 3

If there are any questions, please contact Mr. Dustin Moises by email at dmoises@kauaiwater.org.

Bryan Wienand, P.E. Manager and Chief Engineer October 21, 2019

### **ACKNOWLEDGEMENT OF RECEIPT OF ADDENDUM NO. 3**

Receipt Acknowledged:

Organization

Received by

Date

Title

(Please sign and return this acknowledgement.)

1





## ADDENDUM NO. 3

## **Item 1: Department's Responses to Questions / Comments / Material Substitutions**

- Q: Material Substitution Request for Section SP-8 Reservoir Joint Seal Replacement, 8.07 Materials B. Elastomeric Sealant (Reference Attachment 1): Item No. 5, Wall Base Joint Sealant Item No. 11, Leak Testing
- A: The proposed substitution request is acceptable.





IFB Job No. 17-10, WP2020 #KW-07 Addendum No. 3 Attachment 1

Mark Stiglmeier President/RME 808-651-3804

mark@coatingworkshawaii.com P.O. BOX 1647 Koloa, HI 96756 Contractor's License C-32702

October 10, 2019

### SUBSTITUTION REQUEST

Project: Job No. 17-10, WP2020, Rehabilitate Paua Valley Tank No.1, Kekaha

To: Mr. Dustin Moises

Subject: Request for Product Substitution

Item No. 5: Wall Base Joint Sealant

Section SP-8-Reservoir Joint Seal Replacement, 8.07 Materials B. Elastomeric Sealant

### Proposed Substitution: CIM 1000 Two Component Elastomeric Currently Specified: Sikaflex-2C NS EZ Mix

### Differences between proposed substitution and specified product:

CIM is specified as the interior tank top-coat and is capable for use in perimeter wall base joint sealing as an equal or superior to sika-flex 2C with proper bond-breaker.

Item No. 11: Leak Testing

### Proposed Substitution: Deneef Flex LV Pure



HIGH PERFORMANCE COATINGS AND LININGS

### **GENERAL APPLICATION INFORMATION**

	FOR PROFESSIONAL USE ONLY.
PRECAUTIONS	Avoid contamination with water or moisture. Keep all pails and jugs tightly closed until ready
	for use. All equipment, air supplies, and application substrates must be <b>ABSOLUTELY DRY</b> .
	Do not apply in wet weather or when rain is imminent or when the CIM 1000 Trowel Grade
	or the substrate may become wet within 4 hours after coating. Use caution when applying
	CIM 1000 Trowel Grade in confined spaces. See C.I.M. Industries' Instruction Guide,
TEMPEDATUDE	"Applying CIM Within Confined Spaces" (IG–9).
TEMPERATURE	Surface should be at least 50°F (10°C) and must be 5°F (3°C) above the dew point. <b>DO</b> <b>NOT APPLY WHEN THE SUBSTRATE OR AMBIENT TEMPERATURE IS RISING OR COATING</b>
	IS IN DIRECT SUNLIGHT. CIM 1000 Trowel Grade should be at least 60°F (15°C) when mixed
	and applied. CIM 1000 Trowel Grade may be preheated to facilitate application at low
	temperatures, but working time will be reduced. See C.I.M. Industries' Instruction Guide
	"Applying CIM Coatings in Cold Weather" (IG-11).
EQUIPMENT	CIM 1000 Trowel Grade is best applied with trowel or brush. CIM 1000 Trowel Grade will
	not self level. CIM 1000 Trowel Grade may be sprayed with a properly configured plural
	component spray system. See C.I.M. Industries' Instruction Guide, "Spray Application of
	CIM" (IG-12) or contact C.I.M. Industries for suggested equipment configuration.
	Less than 20 minutes. Working time depends on temperature and method of application.
PRIMING	Porous substrates such as wood and concrete may be primed with CIM 61BG Epoxy Primer
	to minimize outgassing. The maximum recoat window for CIM 61BG Epoxy Primer is 48 hours. See CIM 61BG Epoxy Primer Technical Data Sheet for additional information. Perform
	adhesion tests to confirm adequacy of adhesion to primer.
MIXING	DO NOT THIN. DO NOT HAND MIX. Begin mixing each pail (4.0 gal.) of CIM 1000 Trowel
	Grade Premix using a power mixer (e.g. $\frac{1}{2}$ " drill and an eight inch mud mixer.) Do not draw
	air into the mix. While mixing, slowly add one jug (0.5 gal.) of CIM 1000 Activator to the
	pail and mix thoroughly for <b>3 FULL MINUTES</b> . The proportions are pre-measured. <b>DO NOT</b>
	<b>ESTIMATE.</b> Do not use CIM Mixing Jigs when mixing CIM 1000 Trowel Grade. See C.I.M.
	Industries' Instruction Guide, "Mixing CIM Premix and Activator" (IG–8).
APPLICATION	CIM 1000 Trowel Grade can be applied at 60 mils in one coat. For thicker applications, mixed material should be allowed to build viscosity for several minutes before attempting
	to apply. See C.I.M. Industries' specific substrate Instruction Guide for additional guidelines.
RECOATING	CIM 1000 Trowel Grade may be recoated in 1 hour and must be recoated soon after the
RECOALING	coating no longer comes off on polyethylene (typically within 4 hours of mixing.) If the coating
	has cured longer than this time, the surface must be severely abraded using surface
	grinder or other mechanical means, and be free of dust and debris. Apply CIM Bonding Agent
	no more than 1 hour prior to recoating. Apply all coats within the recoat window except at
	joint lines. Contact C.I.M. Industries for recoat window when using CIM 1000 Trowel Grade
RECOMMENDED	on cant strips and expansion joints. Recommended minimum thickness of the coating is 60 wet mils. Additional
MINIMUM THICKNESS	thickness may be specified, but extended time is required to insure proper solvent release
	prior to placing the liner in potable water service. Contact C.I.M. Industries for additional
A SHOW AND A	information. Refer to CIM 1000 coverage chart for coverage rates.
CURING TIME	Before placing the coating into potable water service or similar applications, allow sufficient
	time for solvents to release from the coating. The required time for a 60 wet mil coating is
	two weeks at 60°F (15°C) and varies depending upon liner thickness and substrate temperature. For many other applications, CIM 1000 Trowel Grade may be placed into service
	in 24 hours. Contact C.I.M. Industries for specific recommendations.
DISINFECTION	CIM 1000 Trowel Grade coating must be washed, rinsed, and disinfected in accordance
	with C.I.M. Industries Instruction Guide "Decontamination or Washing Procedures for
	Potable Water Tank and Fish Pond Service" (IG-10).
CLEAN-UP	Use mineral spirits for clean-up of uncured material. Cured material is very difficult to remove.
	Soaking in solvent will soften the material and may assist in its removal.



**HIGH PERFORMANCE COATINGS AND LININGS** 

### **OVERVIEW**

	•••••••
	CIM 1000 Trowel Grade is a tough, liquid applied, two component, chemical and corrosion resistant urethane elastomeric coating, chemically thickened to allow trowel applications with minimum sag. CIM 1000 Trowel Grade is designed for use with all CIM materials. CIM 1000 Trowel Grade can be used as a crack filler or for application to vertical surfaces and corner flashings. CIM 1000 Trowel Grade offers the same advantages as CIM 1000 and is approved for contact with potable water in accordance with ANSI/NSF 61. CIM 1000 Trowel Grade may be applied at thicknesses up to 250 mils on vertical surfaces in one coat.
ADVANTAGES	<ul> <li>CIM 1000 Trowel Grade offers exceptional waterproofing performance in a formulation modified to allow a thicker vertical film build:</li> <li>Ideal for coating concrete.</li> <li>ANSI/NSF 61 certified for potable water contact up to 180°F.</li> </ul>
	<ul> <li>Forms a tough elastomeric coating able to bridge cracks and fill joints.</li> <li>Tested to ANSI 118.10-199, "Standard Specification for Load Bearing, Bonded, Waterproof Membrane for Thin-Set Ceramic Tile and Dimension Stone Installation".</li> <li>Chemically thickened for application to vertical surfaces, cold joints, cant strips and cracks.</li> <li>Used for repairs or for forming flashings and seals around pipes and roof penetrations.</li> <li>Can be applied to complex tanks with multiple penetrations, sumps, and irregular shapes.</li> <li>Adheres to and bridges between common construction materials such as concrete, steel, glass, wood, and most coatings.</li> <li>Environmentally sound, complying with the toughest VOC standards.</li> <li>Can be repaired when damaged or when new penetrations are added.</li> <li>Excellent wear and abrasion service.</li> <li>UV stable.</li> </ul>
	<ul> <li>Available in easy to use dual cartridges.</li> </ul>
SURFACE PREPARATION	
GENERAL:	Substrates must be <b>clean and dry</b> with no oils, grease or loose debris. CIM Bonding Agent is recommended on all non-porous substrates. Perform adhesion tests to confirm adequacy of surface preparation. See C.I.M. Industries' specific substrate Instruction Guide for specific guidelines.
CONCRETE:	ICRI-CSP 4-6 surface profile exposing aggregate. Concrete must exhibit minimum 3,000 psi compressive strength and be free of release agents and curing compounds. The substrate must be clean and dry (see CIM Instruction Guide IG-2), and free of contaminates.
STEEL:	Minimum 3 mil profile. Immersion service – SSPC-SP10 / NACE No. 2 Near White Blast. Non-Immersion service – SSPC-SP6 / NACE No. 3 Commercial Blast. Use CIM Bonding Agent for greater adhesion.
OTHER METALS:	SSPC-SP1 solvent clean and abrasive blast to roughen and degloss the surface. Use CIM Bonding Agent for greater adhesion.
GLASS:	service roughen the surface.
WOOD:	Substrate must be clean, dry and free of surface contamination.
PREVIOUS COATINGS AND LININGS:	
EARTH:	Use CIM Scrim. Must be plural component spray applied.
	CIM 1000 Trowel Grade is initially shiny black, turning dull over 3 to 6 months when exposed to direct sunlight. For a colored or reflecting surface finish, see C.I.M Industries' Instruction Guide, "Topcoats" (IG–7) for further instructions.
SOLIDS BY VOLUME VOC	89% 88 g/l (0.74 lb./gal.). CIM 1000 Trowel Grade complies with the toughest VOC regulations.



### HIGH PERFORMANCE COATINGS AND LININGS

All information presented in this publication is believed to be accurate, but it is not to be construed as a guarantee of minimum performance. Test performance results are obtained in a controlled laboratory environment using procedures that may not represent actual operating environments.

### **TYPICAL PROPERTIES**

Abrasion Resistance–Wt. Loss, Taber Abraser CS–17 Wheel 1000 gr./1000 rev.		Liner Weight (60 mils wet film thickness)	31 lbs./100 sq. ft.
ASTM D4060	1.2 mg. Loss	Mix Ratio	
Adhesion to Concrete (dry) Elcometer	350 psi	Weight Volume	6.1:1 7.7:1
Deflection Temperature ASTM D648	below -60°F	Mullen Burst Strength ASTM D751, 50 mil	150 psi
Density (Approx.) Premix Activator Mixed & Cured	7.9 lbs./gal. 10.1 lbs./gal. 8.3 lbs./gal.	Permeability to Water Vapor ASTM E96 Method E, 100°F, 100 mil sheet	0.03 perms
Elastomeric Waterproofing ASTM C836 ASTM C957	exceeds all criteria exceeds all criteria	Potable Water Service ANSI/NSF UL File Number - MH17445 WQA Certified	61 to 180⁰F
Extension to Break ASTM D412	300%	Recovery from 100% extension after 5 minutes	98%
Flooring and Shower Lining UPC/IBC ANSI 118.10	Pass	after 24 hours	98% 100%
Green Roof Membrane/Root Barri FLL, 2002	er Pass	Salt Spray ASTM B117	pass 2000 hrs.
Flammability ASTM D2859	pass/combustible	Service Temperature	-60°F to 220°F
UL790	substrate Class A <sup>1</sup>	Softening Point, Ring & Ball ASTM D36	>325°F
Hardness, Shore A ASTM D2240 @ 77°F	60	Tear Strength	
Jet Fuel Resistance FS SS-S-200D	pass for joints	ASTM D624 (Die C) Tensile Strength	150 lbs./in.
Liner Performance Crack Bridging		ASTM D412, 100 mil sheet	800 psi
10 cycles @ -15°F After heat aging	greater than $\frac{1}{8}$ " greater than $\frac{1}{4}$ "	Weathering ASTM D822	pass 5000 hrs.
1Contact C.I.M. Industries for details regarding UL fire ratings			

### **CHEMICAL RESISTANCE**

CIM 1000 Trowel Grade is resistant to a broad range of acids and alkalis. Consult C.I.M. Industries for additional information regarding chemical resistance after reviewing CIM 1000 Chemical Resistance Chart.

### THE INFORMATION PRESENTED IN THIS PUBLICATION IS SUBJECT TO CHANGE WITHOUT NOTICE.

#### CONTACT C.I.M. INDUSTRIES FOR CURRENT INFORMATION.

www.cimindustries.com



HIGH PERFORMANCE COATINGS AND LININGS

### **GENERAL APPLICATION INFORMATION**

	FOR PROFESSIONAL USE ONLY.
PRECAUTIONS	Avoid contamination with water or moisture. Keep all pails and jugs tightly closed until ready
	for use. All equipment, air supplies, and application substrates must be <b>ABSOLUTELY DRY</b> .
	Do not apply in wet weather or when rain is imminent or when the CIM 1000 Trowel Grade
	or the substrate may become wet within 4 hours after coating. Use caution when applying
	CIM 1000 Trowel Grade in confined spaces. See C.I.M. Industries' Instruction Guide,
	"Applying CIM Within Confined Spaces" (IG–9).
TEMPERATURE	Surface should be at least $50^{\circ}F(10^{\circ}C)$ and must be $5^{\circ}F(3^{\circ}C)$ above the dew point. <b>DO</b>
	NOT APPLY WHEN THE SUBSTRATE OR AMBIENT TEMPERATURE IS RISING OR COATING
	<b>IS IN DIRECT SUNLIGHT.</b> CIM 1000 Trowel Grade should be at least 60°F (15°C) when mixed
	and applied. CIM 1000 Trowel Grade may be preheated to facilitate application at low temperatures, but working time will be reduced. See C.I.M. Industries' Instruction Guide
	"Applying CIM Coatings in Cold Weather" (IG–11).
EQUIPMENT	CIM 1000 Trowel Grade is best applied with trowel or brush. CIM 1000 Trowel Grade will
EQUIFINENT	not self level. CIM 1000 Trowel Grade may be sprayed with a properly configured plural
	component spray system. See C.I.M. Industries' Instruction Guide, "Spray Application of
	CIM" (IG-12) or contact C.I.M. Industries for suggested equipment configuration.
POT LIFE	Less than 20 minutes. Working time depends on temperature and method of application.
PRIMING	Porous substrates such as wood and concrete may be primed with CIM 61BG Epoxy Primer
	to minimize outgassing. The maximum recoat window for CIM 61BG Epoxy Primer is 48 hours.
	See CIM 61BG Epoxy Primer Technical Data Sheet for additional information. Perform
	adhesion tests to confirm adequacy of adhesion to primer.
MIXING	<b>DO NOT THIN. DO NOT HAND MIX.</b> Begin mixing each pail (4.0 gal.) of CIM 1000 Trowel
	Grade Premix using a power mixer (e.g. $\frac{1}{2}$ " drill and an eight inch mud mixer.) Do not draw
	air into the mix. While mixing, slowly add one jug (0.5 gal.) of CIM 1000 Activator to the
	pail and mix thoroughly for <b>3 FULL MINUTES</b> . The proportions are pre-measured. <b>DO NOT</b>
	<b>ESTIMATE.</b> Do not use CIM Mixing Jigs when mixing CIM 1000 Trowel Grade. See C.I.M.
	Industries' Instruction Guide, "Mixing CIM Premix and Activator" (IG–8).
APPLICATION	CIM 1000 Trowel Grade can be applied at 60 mils in one coat. For thicker applications,
	mixed material should be allowed to build viscosity for several minutes before attempting
DECOATING	to apply. See C.I.M. Industries' specific substrate Instruction Guide for additional guidelines.
RECOATING	CIM 1000 Trowel Grade may be recoated in 1 hour and must be recoated soon after the coating no longer comes off on polyethylene (typically within 4 hours of mixing.) If the coating
	has cured longer than this time, the surface must be severely abraded using surface
	grinder or other mechanical means, and be free of dust and debris. Apply CIM Bonding Agent
	no more than 1 hour prior to recoating. Apply all coats within the recoat window except at
	joint lines. Contact C.I.M. Industries for recoat window when using CIM 1000 Trowel Grade
	on cant strips and expansion joints.
RECOMMENDED	Recommended minimum thickness of the coating is 60 wet mils. Additional
MINIMUM THICKNESS	thickness may be specified, but extended time is required to insure proper solvent release
	prior to placing the liner in potable water service. Contact C.I.M. Industries for additional information. Refer to CIM 1000 coverage chart for coverage rates.
CURING TIME	Before placing the coating into potable water service or similar applications, allow sufficient
	time for solvents to release from the coating. The required time for a 60 wet mil coating is
	two weeks at 60°F (15°C) and varies depending upon liner thickness and substrate
	temperature. For many other applications, CIM 1000 Trowel Grade may be placed into service
	in 24 hours. Contact C.I.M. Industries for specific recommendations.
DISINFECTION	CIM 1000 Trowel Grade coating must be washed, rinsed, and disinfected in accordance
	with C.I.M. Industries Instruction Guide "Decontamination or Washing Procedures for
	Potable Water Tank and Fish Pond Service" (IG–10).
CLEAN-UP	Use mineral spirits for clean-up of uncured material. Cured material is very difficult to remove.
	Soaking in solvent will soften the material and may assist in its removal.



**HIGH PERFORMANCE COATINGS AND LININGS** 

### SHIPPING, STORAGE AND SAFETY DATA

WARNING	Flammable. Use only in well ventilated areas. Do not store or use near open flame, sparks or hot surfaces. Keep tightly closed. Avoid contact with moisture or water. Keep out of reach of children.			
SAFETY INFORMATION	This product contains petroleum asphalt, petroleum distillates, amine compounds and/or other chemical ingredients. Adequate health and safety precautions should be observed during the storage, handling, application and curing. Refer to C.I.M. Industries' Material Safety Data Sheets for further details regarding the safe use of this product.			
PACKAGING	CIM 1000 Trowel Grade is available in mixed kits of 0.8 gallon and 4.5 gallons. Each unit consists of a container of premix and a smaller container of activator. Quantities have been premeasured to provide the proper mixing ratio, leaving sufficient room in the premix container to facilitate adequate mixing. <b>Do not estimate proportions.</b> CIM 1000 Trowel Grade is also available in 52.5 gal drums and dual cartridges.			
SHIPPING		Premix	Activator	
	Weights			
	0.8 gallon kits	6.6 lb/can(26 lb/box of 4)	1 lb/jug (13 lb/box of 12)	
	4.5 gallon units	36 lb/pail	5.5 lb/jug (33 lb/box of 6)	
	Dual Cartridges	2.5 lb/cartridge (29 lb/box of 12)		
	Static Mixers	6 lb/box (48/box)		
	TG premix drums	470 lb/drum (52.5 gal/drum)		
	Properties			
	Flash Point	101°F	>400°F	
	Shipping Name	Coating Solution	Not Regulated	
	DOT Class	Class 3, UN1139, PG III	Not Regulated	
STORAGE			0	
	Temperature	101°F	70°F to 95°F	
	Shelf Life	2 years	6 months	
	NFPA	Class II	Class III B	
	$^1$ 4.5 gallon units of CIM 1000 Trowel Grade use CIM 1000 Activator.			

#### WARRANTY & LIMITATION OF SELLER'S LIABILITY

C.I.M. Industries Inc. (C.I.M.) warrants that for a period of five (5) years from the date of shipment to the initial purchaser the products, when mixed in proper ratios for the proper length of time, (a) will not become brittle or crack and (b) will provide a water barrier. Due to application variables beyond C.I.M.'s control which may affect results, C.I.M. makes no warranty of any kind, expressed or implied, including that of merchantability, other than that the products conform to C.I.M.'s current quality control standards at time of manufacture. If breach of warranty is established, the buyer's exclusive remedy shall be repayment of the purchase price of the non-conforming CIM membrane product or, at C.I.M.'s option, resupply of conforming product to replace the non-conforming product. The buyer expressly waives any claim to additional damages, including consequential damages.

#### THE INFORMATION PRESENTED IN THIS PUBLICATION IS SUBJECT TO CHANGE WITHOUT NOTICE.



CONTACT C.I.M. INDUSTRIES FOR CURRENT INFORMATION.

A Chase Corporation Company 23 Elm St., Peterborough, NH 03458 Tel: (800) 543-3458 (603) 924-9481 Fax: (603) 924-9482 Web site: www.cimindustries.com FOR PROFESSIONAL USE ONLY.

www.cimindustries.com



# DE NEEF<sup>®</sup> Flex LV PURe

## **Product Description**

DE NEEF® Flex LV PURe is a hydrophobic polyurethane designed to form a flexible gasket when injected into cracks and joints in concrete structures. DE NEEF® Flex LV PURe grout expands on contact with water and quickly cures to a tough, flexible foam that is resistant to most organic solvents, mild acids, alkali, petroleum and micro-organisms.

## Product Advantages

- Free Foam Expansion up to 18 times
- Contains no volatile solvents
- Single Component
- Controlled reaction time
- Improved low temperature performance
- Flex Cat PURe liquid to -40°F

## **Product Applications**

- Sealing leaking cracks in concrete 0.02" and wider
- Sealing moving and non-moving joints in concrete

### Installation Guidelines

Warning: DE NEEF <sup>®</sup> Flex LV PURe must be used with DE NEEF <sup>®</sup> Flex Cat PURe. Consult the Technical Data Sheets and SDS before using.

**Installation Instructions:** For detailed installation instructions refer to the DeNeef technical bulletin for your applicatio

**Catalyst**: Shake catalyst can 2–3 minutes. Pour the desired amount of Flex LV PURe into a clean dry pail. Measure the appropriate amount of Flex Cat PURe (refer to the **Reaction Times** section of this data sheet for the desired set time) and pour it into the pail. Stir until adequately mixed. Exceeding the recommended amount of catalyst may adversely affect the reaction and quality of the cured foam.

**Injection:** During injection the grout will follow the path of least resistance. When the material has stopped penetrating it will continue to expand against the limits of the confined space and compress within itself, forming a dense, closed cell foam.

**Extreme conditions:** For application procedures in extreme temperatures and specific environments or equipment recommendations call the DE NEEF® Technical Service Department.

**Cleaning:** Clean all tools and equipment which have been in contact with the resin with DE NEEF <sup>®</sup> Washing Agent before resin has cured. Products should be disposed of according to local, state, and federal laws.



## **Reaction Times**

т	% CAT	END REACTION	FOAM FACTOR
40°F	1	17'00"	12V
	2	8'30"	14V
	5	4'00"	16V
60°F	1	10'50"	14V
	2	7'00"	16V
	5	3'05"	16V
77°F	1	9'00"	14V
	2	5'35"	16V
	5	2'10"	17V
86°F	1	7'30"	14V
	2	4'40"	16V
	5	1'45″	17V
95°F	1	6'45″	15V
	2	4'00"	17V
	5	1'35″	18V

## Packaging & Handling

DE NEEF<sup>®</sup> Flex LV PURe:

5 gallon metal pail 50 gallon metal drum

### DE NEEF<sup>®</sup> Flex Cat PURe:

25 fl. oz. in 1 qt. metal cans

DE NEEF® Flex LV PURe is sealed under dry nitrogen because it is sensitive to moisture, and should be stored in original containers in a dry area. Storage temperature must be between 40°F and 90°F. Once the packaging has been opened, the useful life of the material is greatly reduced and should be used as soon as possible. Shelf life: 2 years.

## Limitations

### DE NEEF® Flex LV PURe must be used with DE NEEF ® Flex Cat PURe.

Low temperatures will significantly affect viscosity. Flex LV PURe is not designed for void filling and must be used in compression. If site temperatures are extremely low, heat bands or heated water baths may be used on the pails before and during installation to maintain the product's temperature. Avoid splashing water into open containers, as the material is water activated. Avoid exceeding 90°F when warming.

CAUTION: pH NOTICE. Water used to activate PURe Grouts must be in the pH range of 3-10 for optimum foam quality.

## Health and Safety

Always use protective clothing, gloves and goggles consistent with OSHA regulations. Avoid eye and skin contact. Do not ingest. Refer to SDS. For emergencies, call CHEMTREC 1-800-424-9300.

## **Properties**

DE NEEF <sup>®</sup> FLEX LV PURE RESIN		
Solids	100%	ASTM D2369
Viscosity	550 cps at 77°F	ASTM D2196
Color	Pale yellow	
Density	1.02 g/cm <sup>3</sup>	ASTM D4659
Flashpoint	>270°F	ASTM D93
Corrosiveness	Non-corrosive	
DE NEEF <sup>®</sup> FLEX CAT PURE		
Viscosity	15 cps at 77°F	ASTM D2196
Color	Clear to pale grey	
Flashpoint	221°F	ASTM D93
DE NEEF <sup>®</sup> FLEX LV PURE CURED		
Density confined	1.00 g/cm <sup>3</sup>	ASTM D3574
Density free	about 3 PCF	ASTM D3574
Tensile strength	>174 psi	ASTM D3574

Elongation %

100

ASTM D3574

## gcpat.com | North America Customer Service: 1 877-4AD-MIX1 (1 877-423-6491)

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

DE NEEF is a trademark, which may be registered in the United States and/or other countries, of GCP Applied Technologies Inc. This trademark list has been compiled using available published information as of the publication date and may not accurately reflect current trademark ownership or status.

© Copyright 2018 GCP Applied Technologies Inc. All rights reserved.

GCP Applied Technologies Inc., 62 Whittemore Avenue, Cambridge, MA 02140 USA.

In Canada, GCP Canada, Inc., 294 Clements Road, West, Ajax, Ontario, Canada L1S 3C6.

This document is only current as of the last updated date stated below and is valid only for use in the United States. It is important that you always refer to the currently available information at the URL below to provide the most current product information at the time of use. Additional literature such as Contractor Manuals, Technical Bulletins, Detail Drawings and detailing recommendations and other relevant documents are also available on www.gcpat.com. Information found on other websites must not be relied upon, as they may not be up-to-date or applicable to the conditions in your location and we do not accept any responsibility for their content. If there are any conflicts or if you need more information, please contact GCP Customer Service.

Last Updated: 2018-08-24 gcpat.com/solutions/products/de-neef-waterproofing-injection-solutions/de-neef-flex-lv -pure

