# Synthacalk™ GC2+

# Two-Part Polysulfide Rubber Sealant

# I. BASIC USES

Synthacalk<sup>™</sup> GC2+ provides a durable, elastomeric, weather-tight seal for caulking joints in commercial and industrial projects. It is particularly effective where exposure to solvents or chemicals are anticipated.

# 2. MANUFACTURER

Pecora Corporation 165 Wambold Road Harleysville, PA 19438 Phone: 215-723-6051 800-523-6688 Fax: 215-721-0286 Website: www.pecora.com

# **3. PRODUCT DESCRIPTION**

**Typical Applications:** Synthacalk<sup>™</sup> GC2+ is a two part, polysulfide, non sag sealant that maintains an effective bond between materials of similar or dissimilar porosities, surface texture, or expansion coefficients. Typical applications include swimming pools, fountains, cooling towers fuel and chemical storage tanks,wastewater treatment and petrochemical plants.

**Limitations:** Synthacalk<sup>TM</sup> GC2+ is not recommended for:

- Structural or butt glazing.
- Joints less than 1/4" (6 mm) in width or depth.
- Certain architectural paints and finishes without prior testing.

## PACKAGING

 I-1/2gallon (3.8L) unit Consisting of base and activator nested in 2-gallon pail.)

# COLOR

Dark Grey

# 4. TECHNICAL DATA

Applicable Standards: Synthacalk™ GC2+ meets or exceeds all aspects of Federal Specification TT-S-00227E, Type II, Class A in all respects except Section 3.5.7, "Stain and Color Change", ASTM C920, Type M, Grade NS, Class 25, Use, NT, T, M, G, A, with the exception of ASTM C510 "Stain and Color Change", Also exceeds the test requirements of ASTM C1247 for sealants exposed to continuous immersion in liquids and NSF Standards 61, Section 6 for Joining and Sealing Materials.

Synthacalk<sup>™</sup> GC2+ two component joint sealant is resistant to the effects of sunlight, rain, snow, ozone, aging, shrinkage, and the daily and seasonal cyclic changes in temperature, even after years of exposure.

# 5. INSTALLATION

Joint Design: The minimum width of the joint should be 4 times the anticipated movement, but not less than 1/4" (6 mm). Maximum recommended width is 1" (24 mm).The depth of the joint should be no more than one-half the width without exceeding the minimum/maximum limits. Maximum depth should be 1/2" (12 mm). For additional information, contact Pecora's Technical Services Department.

**Surface Preparation:** Joint interface must be clean, dry, and free from oils, loose mortar, laitance, waterproofings, and other contaminants. A thorough grinding, sandblasting, or solvent cleaning may be required to expose clean, sound surfaces.

**Priming:** Synthacalk<sup>TM</sup> P53VOC primer must be applied to joint surfaces. Sealant must be applied after primer has dried, but within 8 hours after application.

**Joint Backing:** Backer rod is necessary to control depth of sealant and provide

# **Specification Data Sheet**

PECORA CORPORATION Architectural Weatherproofing Produces USA - since 1862

a base for tooling pressure. Backer rods should be closed-cell polyethylene foam. Use a size that will compress at least 25% when inserted into the joint. In joints too shallow for backer rod, a bond-breaker tape should be used to prevent three sided adhesion. (Typical bond breakers are polyethylene tape or coated papers).

**Application:** Synthacalk<sup>™</sup> GC2+ is supplied in a non-sag consistency which will gun easily with conventional caulking equipment. Fill joint completely, using standard caulking equipment and tool immediately. Proper width to depth ratios must be maintained. Thorough blending of the base and activator components is essential for optimum sealant performance. Remove the Activator (Part A) from the Base (Part B) container. Also, be sure to remove the polyethylene sheet or tray. Before adding Part A, mix Part B with a Pecora #2 mixing paddle with a low speed, heavy duty electric drill. Then, add Part A to Part B and mix for six (6) minutes, or until the material is completely blended, scraping down the sides of the container and mixing paddle periodically during mixing.

**NOTE:** Do not mix base and activator components from one shipment with components from another.

**Application Life:** I hour at  $75^{\circ}$  F (24° C); higher temperatures shorten application life. Substrate temperature must range between  $50^{\circ}$  F ( $10^{\circ}$  C) and  $110^{\circ}$  F ( $43^{\circ}$  C).

**Shelf Life:** One year in original, unopened containers stored at temperatures lower than  $80^{\circ}F$  ( $26^{\circ}C$ ).

TYPICAL PHYSICAL PROPERTIES at 77°F (25°C), 50% RH		
Test Property	Value	Test Procedure
Specific Gravity, mixed (g/ml)	1.70	ASTM D70
Solids (%)	100	ASTM CI250
Joint Movement (%)	+/-25	ASTM C719
Hardness (Shore A)	25-30	ASTM C661
Work Life (hours)	l I	Pecora Corporation
Tack-Free (hours)	<24	ASTM Ċ679
Elongation (%)	500-550	ASTM D412
Tensile Strength (psi)	150-200	ASTM D412
100% Modulus (psi)	50	ASTM D412
200% Modulus (psi)	80	ASTM D412

Since Pecora architectural sealants are applied to varied substrates under diverse environmental conditions and construction situations it is recommended that substrate testing be conducted prior to application.

**Tooling:** Tooling is recommended immediately after application to ensure full contact with the joint interfaces. Dry tooling is preferred. Care should be taken to avoid contamination of open joints.

Clean Up: Remove Synthacalk<sup>™</sup> GC2+ from equipment before it cures. Recommended solvents are MEK\*, Toluene\* or Xylene\*. These solvents are not effective after cure. Cured material may be removed by cutting with sharp tools, sandpapering or softening with chlorinated solvents\*.

\*(Solvents mentioned are toxic and flammable. Observe solvent manufacturer's precautions and refer to Safety Data Sheets).

Allow Synthacalk<sup>™</sup> GC2+ to attain a complete cure before filling caulked area with water (7 days minimum). Surface of Synthacalk<sup>™</sup> GC2+ can be painted after complete cure.

**Precautions:** Wear gloves or a barrier hand cream. Avoid direct contact with material: do not take internally. Remove promptly from skin with a commercial hand cleaner before eating or smoking. Avoid inhaling vapors.

# FOR PROFESSIONAL USE ONLY. **KEEP OUT OF THE REACH** OF CHILDREN.

# 6. AVAILABILITY AND COST

Pecora products are available from our plants and warehouses, or from stocking distributors in all major cities. For the name and telephone number of your nearest representative call 800-523-6688 or visit our website at www.pecora.com.

# 7. WARRANTY

Pecora Corporation warrants its products to be free of defects. Under this warranty, we will provide, at no charge, replacement materials for, or refund the purchase price of, any product proven to be defective when installed in accordance with our published recommendations and in application considered by us as suitable for this product. This warranty is in lieu of any and all other warranties, expressed or implied, and in no case will Pecora be liable for incidental or consequential damages.



# 8. MAINTENANCE

If the sealant is damaged and the bond is intact, cut out the damaged area and recaulk. No primer is required. If the bond has been affected, remove the sealant, clean and prepare the joint in accordance with the instructions under "INSTALLATION".

# 9. TECHNICAL SERVICES

Pecora representatives are available to assist you in selecting an appropriate product and to provide on-site application instructions or to conduct jobsite inspections. For further information and assistance, please call our Technical Services department at

215-723-6051 or 800-523-6688.

specification and/or use Rating Key: R = Recommended

C

NR

NR

R R R

R NR NR NR R R R

NR

R NR

R R R

R

C NR R NR

R R R

NR NR

R NR NR

NR NR C C R

R

R C

Acetic Acid, 10% Acetic Acid, 50%

Acetone Acrylonitrile

ASTM Fuel D

Benzene Benzoflex 9-88

Barium Hydroxide, 10%

Benzoic Acid, 5% Borax Solutions, 25% Boric Acid Solution, 20%

Boric Acid Solution, 20% Borohydride Solution I -4 Butanediol Butyl Benzyl Phthalate Butyl Cellosolve Butyl Cellosolve Acetate Butyl Oxitol Calcium Chloride Solutions, 50% Calcium Chloride Solutions, 50%

Calcium Hydroxide, 20% Calcium Hypochlorite, 50% Carbon Disulfide

ChlorinatedWater, Ippm ChlorinatedWater, I0ppm ChlorinatedWater, I00ppm

Chromic Acid, 35% Copper Sulfate Solution, 20%

Creosote Cumene Hydroperoxide

Carbon Tetrachloride

Carbitol Acetate Caustic Potash, 45%

Cellosolve Acetate

Chromic Acid, 15%

Cyclohexane Dibutyl Carbotol

Diethylene Glycol

Ethyl Acrylate

Ethyl Alcohol

Dimethyl Formanide Epichlorohydrin Ethyl Acetate

-Ethyl Hexyl Acrylate

PRODUCTS

Ethylene Dichloride Ethylene Glycol Ferric Chloride, 50%

Acetic Acid, Glacial

Aluminum Sulfate Solution, 50%

Ammonium Perciniorate, 30% Ammonium Polysulfate Ammonium Sulfate Solution, 30% Amyl Alcohol Arcosolv PM Acetate ASTM Fuel A ASTM Fuel B ASTM Fuel B

Ammonium Chloride Solution, 50% Ammonium Hydroxide Solution, 28% Ammonium Perchlorate, 15% Ammonium Perchlorate, 50%

# 10. FILING SYSTEMS

http://www.4specs.com

07 10 00 Waterproofing 07 92 00 Sealants



NR = Not Recommended

NR

R R

N-Butyl Alcohol NaphthaVM & P

Naphthalene Oil

### CHEMICAL RESISTANCE CHART This data should only be used as a guide. It is reco actual (or at least simulated) service conditions before

C = Intermittent Contact; not continuous immersion Ferrous Sulfate, 10% Fluoboric Acid, 10% NR Formic Acid, 90% Fuel Oil/Diesel Fue 2-Furaldehyde NR R R Gasoline, Leaded Gasoline, Unleaded Gashol Glycol Ether EM NR R Héptane Herbicides – Marksman – Banvel R R C C R - Dual 8E Bicep 6L -Aatrex 4L - Prowl 3.3 EC R R —Tri-4 — Treflan — Serve 24E — Sonalan E.C. R R R Hexane Hexane Glycol R C NR Hydrochloric Acid, 20% Hydrochloric Acid, 37% Hydrofluoric Acid, 5% Hydroflouric Acid, 10% R R Hydroflouric Acid, 23% R R Hydrogen Peroxide, 3% Hydrogen Peroxide, 20% Hydrogen Peroxide, 35% Isobutyl Alcohol R Isobutyl Isobutyl activity Isophorone, 97% Isopropyl Alcohol

- NR
- R C R R
- Isopropylamine Isotearic Acid Jet Fuel (See ASTM Fuels)
- R R
- Kerosene Lacquer Solvents Linseed Oil Lubricating Oils
- Magnesium Chloride Solution, 20% R
- Magnesium Hydroxide Solution, 20% Malathion 50 Maleic Anhydride, 25% Slurry NR
- R NR
- R C C NR

- C C C NR
- Maleic Anhydride, 25% Slurry 2-Mercaptoethanol Methyl Acrylate Methyl Carbitol Methyl Calbisolve Acetate Methyl Cellosolve Acetate Methyl Hyl Ketone Methyl In-Amyl Ketone Methylen Chloride Methyl Terr-Buryl Ether, 98% Mineral Spirits

PERFORMANCE

- R R R Mineral Spirits Motor Oil 10W/40 N-Butyl Acrylate
- Nitric Acid, 10% Nitric Acid, 30% Nitric Acid, 60% NR Oleic Acid Oxalic Acid, 20% Paraffinic Oil Pesticides -Arrosolo 3.3E - Eradicane 6.7E Phenolic Resins R RRCC Phosphoric Acid, 50% Phosphoric Acid, 60% Phosphoric Acid, 75% Phthalic Andydride, 38% slurry R Pickling Solution — 20% Nitric Acid, 4% HF — 17% Nitric Acid, 4% HF NR NR Potassium Carbonate Potassium Carbonate Potassium Hydroxide Solution, 25% Potassium Hydroxide, 50% Potassium Permanganate, 6% Propylene Glycol Propylene Glycol Propylene Cxide SAE I0 Oil Shell Tellus Oil 46 Slodeol 5008 NR NR R R R Skydrol 500B Soap Solutions Sodium Bicarbontae Solution, 25% R Sodium Chloride Solution, 25% Sodium Cyanide, 5% Sodium Hydroxide, 50% Sodium Hydroxide, 50% @ 120°F Sodium Hypochlorite, 5% Sodium Hypochlorite, 5% Sodium Sulfide, 25% Solvent 150 NR NR R NR Stearic Acid, 20% Styrene Sulfuric Acid, 20% NR R NR Sulfuric Acid. 50% NR NR NR NR Sulfuric Acid, 66% Sulfuric Acid, 8% @ 120°F Tetrahydrofuran Tetrahydrofurfuryl Alcohol Texanol Toulene NR Transmission Fluid R C C R I, I, I Trichloroethane Triton X100 Urea, 10% Urea Ammonium Nitrate, 32% RCRCRR Vinylidene Chloride Vinyl Acetate Xylene Zinc Chloride, 10% Zinc Nitrate, 17%

www.pecora.com

165 Wambold Road, Harleysville, PA 19438 Phone: 800-523-6688 • 215-723-6051 • FAX: 215-721-0286