SPECCO® DATA

B-40 CR FLOOR COAT

TWO PART EPOXY CONCRETE COATING

PRODUCT DESCRIPTION: Specco B-40 CR Floor Coat is a two component, chemical resistant epoxy coating formulated to protect interior concrete surfaces. Specco B-40 CR Floor Coat provides excellent wear resistance under traffic conditions and exhibits excellent resistance to a variety of chemicals. B-40 CR Floor Coat is furnished in clear or pigmented formulations and is approved by the U.S.D.A. for use in incidental food contact areas. Ideal uses for B-40 CR Floor Coat include garage or basement floors, warehouse floors, chemical plants, auto/truck repair bays, food processing and related manufacturing plants.

BENEFITS: CLEAR FORMULATION WITH GOOD U.V. STABILITY AND COLOR RETENTION…CAN BE APPLIED AS A NON-SLIP FLOOR FINISH…LOW VISCOSITY FOR EASY APPLICATION …HARD SEMI-GLOSS FINISH...BALANCED COMBINATION OF CHEMICAL RESISTANCE PROPERTIES…NO SEPARATE PRIMER REQUIRED…CAN BE USED AS A MORTAR BINDER TO ENCAPSULATE LOOSE AGGREGATE PATIO STONES IN EXTERIOR APPLICATIONS

PHYSICAL DATA @ 70 ºF (21ºC):	**APPROXIMATE VALUES:**
Composition - Part A (Resin):	100% solids liquid epoxy resin
Composition - Part B (Cure):	Modified cycloalphatic amine
Weight per gallon - Part A (Resin):	9.10 lb./gallon
Weight per gallon - Part B (Cure):	8.60 lb./gallon
Weight per gallon (Mixed):	8.92 lb./gallon
Color -Part A (Resin):	Clear: Gardner scale = 3 max.
Color -Part B (Cure):	Clear: Gardner scale = 1 max.
Mixing ratio (A to B):	2 parts A to 1 part B by volume
Viscosity (Mixed):	500 cps
Pot life:	30-40 minutes
Initial cure:	9-12 hours
Tensile strength: ASTM D-638	7135 psi
Tensile elongation: ASTM D-638	2.7%
Flexural strength: ASTM D-790	13,380 psi
Bond strength (steel to steel): ASTM C-882	820 psi

CHEMICAL RESISTANCE:	**RATING:**	**CHEMICAL RESISTANCE:**	**RATING:**
Xylene	Excellent	1,1,1 Trichloroethane	Excellent
10% Acetic acid	Excellent	10% Hydrochloric acid	Excellent
20% Nitric acid	Excellent	Ethyl Alcohol	Excellent
Distilled water	Excellent	Ethylene Glycol Monoethyl Ether	Poor
50% Sodium hydroxide	Excellent	Methyl Ethyl Ketone	Poor
70% Sulfuric acid	Excellent	Synthetic gasohol	Poor

SURFACE PREPARATION: New concrete must be a minimum of 28 days old and exhibit an open surface texture with all curing compounds or sealers removed. Surfaces must be structurally sound, clean, dry and free of dust, dirt, oils, salts, laitance and other contaminates. Remove defective concrete, cavities, cracks, voids, and other defects by routing to sound material. Rough sand, diamond grind or scarify the concrete surface to provide an open, absorptive substrate to achieve a surface profile equal to CSP 3-5 in accordance with ICRI Guideline 03732. Properly clean profiled area from any remaining residue or dust. It should be noted that mechanical abrasion preparation methods are preferred methods for surface epoxy coating adhesion as opposed to acid etching. If acid etching is chosen, it is important that the remaining salts of the reaction are pressure washed away. Allow the concrete to dry completely for a minimum of 24-48 hours, check moisture levels before proceeding with B-40CR Floor Coat application. To test if concrete absorption is adequate after etching, blasting, or grinding, note that the surface should darken and absorb water when applied by cup or dropper. If the water beads or does not absorb into the surface, do not apply the epoxy and rework the surface with additional abrasion, etching or cleaners/ degreasers as needed.

MIXING DIRECTIONS: Pre-mix Specco B-40 CR Floor Coat Part A and Part B separately. Combine two parts of Part A base, to one part of Part B hardener, in a clean container and mix thoroughly using a slow speed motor and paddle mixer. Scrape the sides and bottom of the container during mixing. Do not aerate the mix. Increased material volume and temperature will shorten pot life.

APPLICATION: After mixing, pour the material onto the floor in a ribbon-like pattern. **Note-** Leaving the mixed epoxy in the mixing bucket can shorten pot life due to

APPLICATION (Continued): volume heat generation, as epoxies will set slower and provide more application time when poured immediately from the mixing bucket. Apply Specco B-40 CR Floor Coat by brush, roller, smooth or notched squeegee or airless spray immediately after mixing. 3/8 inch nap rollers are recommended most commonly. Using too high a nap size on the rollers can potentially entrap air. For thicker mil applications, spiked or nylon rollers can be used to help release entrapped pinholes or bubbles if present. Use mohair or lambswool based rollers to avoid lint or roller particle lint debris from contaminating the epoxy in smooth decorative applications such as counter tops. To help ensure uniform flooring applications with no high or low spots, Specco recommends that the initial ribbon pattern be pulled out evenly in one direction with the squeegee, followed by a 3/8 inch cross-rolling (perpendicular) to the squeegee direction, and then quickly back-rolled (parallel) in the original squeegee direction. For large jobs, the use of wider rollers (18 inch) is also recommended over smaller 9 or 12 inch size rollers since the larger width allows both a faster application with less potential lap lines. For best results, and especially when applying flake or aggregate into the base coat, two coats are recommended. The first coat should be tack free (fingernail hard) before the second coat is applied. If the second coat cannot be applied for at least 4-5 days after the first coat, a light sanding is also recommended to help provide more surface area for the topcoat to bond to. Protect the coating from traffic, rain, and dust until the material has sufficiently set. Do not subject B-40 CR Floor Coat to heavy mechanical or chemical use until final through cure has occurred, which is typically a minimum 7 days @ 70° F.

SLIP RESISTANCE- AGGREGATE ADDITIONS: Epoxy coatings, due to their inherit hardness, can exhibit increased slip versus other types of floor coatings when they are wet. The addition of a medium sized (AFS 35-50) emery, flint, quartz or silica sand aggregate or an optional decorative colored acrylic flake is highly recommended as slip resistant additives for smooth flooring substrates where there is high pedestrian traffic that can become wet during routine use. To broadcast aggregates, first apply the B-40 CR Floor Coat epoxy uniformly by roller or squeegee onto the floor. Next, immediately broadcast the emery or sand aggregate additions into the freshly applied surface, starting in a corner and working outward or backward. The applicator can wear ¾ inch "spiked" shoes for this application to make uniform placement of the aggregate easier to the entire floor area. After the coating has set (typically 12-16 hours or by the following day), sweep or vacuum excess aggregate from the surface so that it is level and apply a second coat of B40 CR Floor Coat to encapsulate the aggregate particles to allow easier cleaning and to lock them into place for improved abrasion. Keep in mind that too coarse of an aggregate will be hard on bare feet and may be harder to clean and maintain since it can tend to hold surface dirt in the high use "traffic" lanes. Whereas too fine an aggregate is also a problem as it may sink into the epoxy coating and have little or no effect on the traction of the final film. **COLOR FLAKE:** As an optional aggregate system, the use of decorative acrylic flake can be broadcast into the epoxy in the same manner as the sand aggregates. In addition to increased slip resistance benefits, the main advantage of the color flake system is that it provides beautiful color aesthetics to the concrete surface and can be used for either partial or full coverage. For partial coverage, use small amounts (1-2 lb / 100 square feet) with a tinted epoxy base for "highlighted" or speckled color effects. For full (complete hiding) coverage use larger amounts (10 lb / 100 square feet) with a clear epoxy base. **COLOR OPTIONS:** B-40 CR Floor Coat epoxy and color flake are available in standard colors. Consult Specco Industries for these color choices or any specialty color requests. **COVERAGE:** 100-150 square feet per gallon average depending on final mil thickness. Using a 3/8 inch nap roller applied evenly to the surface typically leaves a thickness of 15.6 mils (1/64 inch) or 106 square feet per gallon. Second coats can be applied thinner usually at 8-10 mils thickness and will usually spread higher at 200-250 square feet per gallon. **CAUTIONS:** Material must be mixed with mechanical agitation for proper dispersion and cure. Apply only to dry concrete surfaces. Not recommended for concrete less than 28 days old. Do not apply B-40 CR Floor Coat in temperatures below 50° F or to frozen, frost filled or damp surfaces. Not recommended for outdoor applications as product may yellow in strong sunlight environments. Part B is hygroscopic (moisture scavenging), keep container tightly closed when not in use. Due to low moisture vapor transmission and inherent chance of film yellowing with direct sun exposure, B-40CR Floor Coat is recommended for interior applications only, with the exception of aggregate encapsulation on patios or walkways. **WARNINGS:** Avoid contact with skin and eyes as ingredients may cause irritation. Wear protective clothing and safety glasses during application. Keep away from heat, sparks and open flame. Use with adequate ventilation. Keep away from food and drink. Do not take internally. B-40 CR contains an alkaline amine. Refer to product M.S.D.S. (Material Safety Data Sheet) for further health and safety information. FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. **H.M.I.S. CODES:** Component A: HEALTH = 2, FLAMMABILITY = 1, REACTIVITY = 0, P.PROTECTION = E. Component B: HEALTH = 3, FLAMMABILITY = 1, REACTIVITY = 0, P.PROTECTION = E **SHIPPING NAMES:** Component A: Epoxy Resin / CAS# 025085-99-8 / Not currently regulated by D.O.T. Component B: Polyamide Curing Agent / CAS# 2855-13-2 / Isophoronediamine / Not regulated **SHIPPING CLASS:** ITEM 155250, SUB 2, LTL 65-CONCRETE COATING **STORAGE:** Ideal storage is between 60º to 80º F. Keep from freezing. **SHELF LIFE:** 1 year stored properly. Depending on storage conditions, the shelf life may be extended. **PACKAGING:** 1, 3 and 15 gallon units **LIMITED WARRANTY:** This product is warranted to be of merchantable quality when used according to the instruction herein. It is not warranted to be suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is limited to the replacement of the product as purchased, if found to be defective upon inspection by the manufacturer. This limited warranty is issued and accepted in lieu of all other expressed warranties and explicitly excludes liability for consequential damages. Buyer assumes all risk and liability resulting from the use of this product. Revised – 10-30-09