

### Compound 638

#### Product Description

Chem-Set Compound 639 a structural bonding epoxy for laminating and bonding counter-tops. It lays down a thin, tight bond line, meaning you will never have to return to a job site to solve adhesive problems.

#### Product Features

- Strongest adhesive bond available
- Holds up through rigorous machining
- Water clear, polishable
- Will not shrink
- Ideal for high humidity or freeze-thaw conditions
- More economical than Edge System with better UV resistance and slightly thinner
- Gallon size comes in easy to pour bottles
- Can be tinted using Touchstone™ Liquid Tints
- Can be dispensed using Easy Mix Dispenser



chemical-concepts.com

**800.220.1966**

410 Pike Road • Huntingdon Valley, PA 19006

#### Applications

- Counter-top Fabrication
- Structural Bonding
- Stone mitering, seaming, laminating, and chip repair

#### Specifications

|                               |  |
|-------------------------------|--|
| Product Type:                 | Epoxy  |
| Viscosity:                    | Flowing  |
| Mix Ratio:                    | 2:1  |
| Set Time:                     | 2 Hours  |
| Cure Time:                    | 24 Hours   |
| Pot Life:                     | 15 Minutes   |
| Application Conditions:       | Interior, Exterior; Horizontal                               |
| Recommended Application Temp: | 75°F (24°C)  |
| Coverage:                     | Per Gallon: 50mils (1/16")30ft <sup>2</sup> or 231cu. inches |
| Available Colors:             | Clear  |
| Sizes:                        | Quart (946ml), Gallon (3,785ml), 5 Gallon Pail (18,927ml)    |
| Other:                        | NA   |

## Compound 638

Use gloves, wear eye protection, and avoid skin contact. When grinding cured joints, wear a dust mask. Substrate to be bonded must be completely dry and dust free. Mix only the amount of material which can be used in 10 minutes (or less, if Accelerator is used). Avoid stressing joint before complete cure of material. Mask areas which must be kept free of material. Clean tools of uncured material using toluene or xylene. Use caution, these solvents are flammable and ensure local ventilation. Remove cured material mechanically.

### Mixing Instructions

Minimum material and substrate temperature should be at or above 55°F (13°C). Combine the two ingredients at the following mix ratio: Two parts of A to one Part B.

#### Instructions for use:

To achieve the best results, the contact surfaces must be thoroughly cleaned and dried. Before adding the hardener, the resin may be tinted with Stone Steam colorants to match the color of the stone. Then, thoroughly mix with 1%-2% of the hardener by weight. At a temperature of 70°F, the mixture stays workable for 4-6 minutes. Higher temperatures shorten the work time and lower temperatures will extend the work time. After 20 minutes the adhesive is fully cured and machinable.

Always test the color match for shadowing on granite prior to application. Store product below 75°F.

### Temperature Dependency

The adhesive, substrate, aggregate, and environment's temperature will affect the working properties of the material. Lower temperatures will prolong cure, higher temperatures will shorten cure time. Every 15°F (-9°C) results in doubling the speed of cure. Therefore, at 90°F (32°C) set time is cut in half, at 60°F (16°C) the set time is doubled. Do not use on substrate at a temperature below 55°F (13°C).

### Shelf Life & Storage

If Compound 638 is exposed to below room temperature conditions for extended periods of time, it may crystallize, giving it a stiff, grainy, consistency. The product must be reconstituted before use by heating it up to 150°F degrees. Stir until it becomes a homogeneous liquid.

### Limitations

Use on dry stone. Use on oil, grease, and coating-free substrates. Minimal yellowing and chalking will occur when exposed to ultra-violet light.

### Safety

Before storing, mixing, or applying this product, read and understand all the product's Safety Data Sheets. For a copy of the SDS, contact Chemical Concepts, Inc. at 1 (800) 220-1966.

### Warranty

This product's warranty is limited to replacement of defective material and freight charges to destination only. Chemical Concepts, Inc. is not responsible for consequential damages.

### Compound 639

#### Testing Data

| <u>Strengths</u>                            | <u>Results</u>            | <u>Test Method</u> |
|---|---------------------------|--------------------|
| Tensile                                     | 3,058 psi                 | ASTM D-638         |
| Compressive                                 | 4,736 psi (Stone Failure) | ASTM D-905-89      |
| Flexural                                    | 374,423 psi               | ASTM D-790         |
| <u>Modulus</u>                              |                           |                    |
| Tensile                                     | 573,157 psi               | ASTM D-638         |
| Compressive                                 | Not available             | Not available      |
| Flexural                                    | 374,423 psi               | ASTM D-790         |
| Elongation:<br>Tensile: Elongation at break | 0.0063                    | ASTM D-638         |
| Shore D                                     | 80                        | ASTM D-1706        |
| Heat Distortion Temp                        | 135°F (57°C)              | ASTM D-648         |
| Shear Strength                              | Not available             | Not available      |
| 24 Hour Water Absorption                    | Not available             | Not available      |
| Other                                       | NA                        |                    |



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