Sakrete Trowel Grade Leveler and Underlayment (B-1 Leveler) is a fast setting trowel grade, polymer modified cement based floor underlayment for interior applications.

**Features:**
- Bonds to concrete and wood
- Applications Feather edge to 2” (51 mm)
- Apply ceramic tile within 3 - 4 hours and moisture sensitive floor coverings in 16 - 24 hours
- Fast setting and easy to mix

**Use For:**
- Leveling and smoothing interior floors
- **Over:**
  - Concrete
  - Cementitious backer board
  - Exterior grade plywood (requires the addition of Sakrete Bonder & Fortifier)
  - Embossed Vinyl Tile (requires the addition of Sakrete Bonder & Fortifier)
- **Under:**
  - Vinyl Tile, Asphalt tile, Vinyl flooring
  - Ceramic, Quarry and Mosaic tile
  - Wood flooring
  - Carpet

**Yield/Water/Coverage:**

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<th>Bag Size</th>
<th>Coverage</th>
<th>Water</th>
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| 25 lb (11.3 kg) | 25 ft² (2.3 m²) at 1/8” (3 mm) thick | Thick application: 3.5 to 4 qts (3.3 to 3.8 L)
|            |          | Skim coating: <1/8” to feather edge - 2 qts (1.9 L) Sakrete Bonder & Fortifier plus 2 - 2.5 qts (1.9 - 2.4 L) water. |

NOTE: Yield and water are approximate.

**Technical Data:**
- Set Time ASTM C 266
  - Initial Set Time – 20 - 25 min.
  - Final Set Time – 25- 30 min.

- Compressive Strength ASTM C109
  - 4 hours = >1,600 psi (11 MPa)
  - 24 hours = >2,000 psi (14 MPa)
  - 7 day = >3,600 psi (25 MPa)
  - 28 day = > 5, 000 psi (34 MPa)

- Bond Strength ASTM C882
  - 28 days = > 680 psi (6 MPa)

- Flexural Strength ASTM C78
  - 7 day = >1,500 psi (10 MPa)
  - 28 day = >1,600 psi (11 MPa)

- Tensile Strength ASTM C190
  - 7 day = >300 psi (2 MPa)
  - 28 day = >500 psi (3 MPa)

**COLOR:**
- Gray

**Preparation/Application:**
For best results all materials should be stored between 40°F (4°C) and 80°F (27°C) 24 hours prior to installation.

Refer to:
- ACI 302.1 Guide for Concrete Flooring and Slab Construction
- ACI 304.1 Guide for Measuring, Mixing, Transportation and Placing Concrete.

NOTE: it is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use.

**Over Concrete:**
1. Use only when the product, air, and surface temperature are above 50°F (10°C) for a minimum of 24 hours.
2. Remove all loose and foreign matter or materials such as sealers, paints, curing compounds, or glues that will interfere with bonding. The existing substrate must be sound, solid, and clean.
3. Slick or sealed surfaces must be roughened.
4. New slabs must be properly cured a minimum of 28 days.
5. Concrete floors on or below grade must have an effective vapor barrier under the slab. Testing is recommended to determine if the moisture levels are acceptable. Check with the floor covering manufacturer to determine allowable moisture levels before proceeding.
6. Dampen concrete surface bringing it to a SSD (Surface Saturated Dry) condition before application of the material.
7. For Porous and highly porous substrates 2 coats of Sarkrete Bonder & Fortifier may be necessary. The dilution rate may vary from 1:1 to 1:3 (primer to water).
8. Mix only the amount of material that can be placed in 20 minutes.
9. Place and consolidate the mix. Work into voids and level with a trowel.
10. Do not overwork as this may lead to dusting or cracking.

**Suspended Wood Floors:**
1. The floor must be structurally sound.
2. Remove materials that will prevent bond.
3. Where the sub-floor boards are more than 4” (102 mm) wide, cover with sheet underlayment per project requirements or in accord with the TCNA (Tile Council of North America) recommendations for installation of interior wood subflooring and applicable sections of ANSI AN-3 Floors of Plywood.
4. Allowable deflection is L/360 maximum.
5. Prime with Sakrete Bonder & Fortifier.
**Vinyl Floors:**
1. Remove waxes and other floor treatment materials.
2. Vinyl flooring should be lightly roughened. This can be accomplished by using a fine grit sand paper. Follow by cleaning and priming the vinyl using the Sakrete Bonder & Fortifier.
3. Mix the Sakrete B-1 Trowel Grade Leveler to the skim coating consistency as published in the YIELD/Coverage/Water chart above.
4. If vinyl flooring is over wood substrate refer to suspended floor structural requirements.

Refer to:
- ACI 305R Guide to Hot Weather Concreting
- ACI 306R Guide to Cold Weather Concreting

**Mixing:**
1. Add half of the clean potable water (see table above for water amounts for Thick Applications or Skim Coating) to a clean empty pail, then add material and mix using a power drill and a mortar or paint mixing paddle.
2. Add the remainder of water as needed.
3. Mix for a maximum of 3 minutes to achieve a workable mix.
4. Re-temper as pot life nears the set time without adding additional water. Excess water reduces strength and durability and can cause cracking, dusting or scaling.
5. Place the mixed material at desired thickness up to 2” (51 mm)
6. For repairs greater than 2” (51 mm) thick, use Sakrete Bonder & Fortifier and apply in multiple lifts.
7. Air cure for a minimum of 2 hours depending on thickness of application.

**NOTE:** For small repairs, mix the dry compound with water to a soft putty-like consistency. When vinyl, wood, or other types of floor coverings are to be installed over Sakrete Trowel Grade Leveler and Underlayment, the requirements of the floor covering manufacturer are to be followed with respect to but not limited to levels of moisture.

**Precautions:**
Air, mix and substrate temperatures should be between 50°F (10°C) and 90°F (32°C). For applications outside this range of temperatures and conditions, contact Sakrete Technical Service.
- Colder temperatures or higher humidity conditions will retard set times
- Use only clean mixing container and tools
- Do not over trowel
- Do not overwater

**Safety:**
READ and UNDERSTAND the Safety Data Sheet (SDS) before using this product.
WARNING: Wear protective clothing and equipment. For emergency information, call CHEMTREC at 800-424-9300 or 703-527-3887 (outside USA).
KEEP OUT OF REACH OF CHILDREN.