



Gravel-Lok[®]

AMBER BINDER

Contains: MDI Prepolymer CAS No. 59675-67-1
Diphenylmethane 2,4'-diisocyanate CAS No. 5873-54-1
Diphenylmethane 4,4'-diisocyanate CAS No. 101-68-8
1,3-dioxolan-2-one, 4-methyl- CAS No. 108-32-7

FOR INDUSTRIAL USE ONLY. WARNING: DO NOT INHALE. DO NOT SWALLOW. WARNING: ALWAYS WEAR PROPER PERSONAL PROTECTIVE EQUIPMENT. READ COMPLETE SDS AT WWW.CELLTEKDIRECT.COM BEFORE USE. DO NOT RE-USE EMPTY DRUMS OR CONTAINERS; DECONTAMINATE, PUNCTURE OR CRUSH. FOR OUTDOOR USE ONLY IN WELL-VENTILATED AREAS. PERSONS WITH KNOWN RESPIRATORY ALLERGIES SHOULD NOT USE THIS PRODUCT. OVEREXPOSURE MAY CAUSE PERMANENT RESPIRATORY DAMAGE.



DANGER

May cause respiratory irritation.

May cause damage to respiratory system through prolonged or repeated exposure.

Do not get liquid on anything not intended to be treated. It is all but impossible to remove. Consult Cell-Tek Geosynthetics at 888-851-0051 with any questions.

Lot #: _____

Mfg. Date: _____

(Shelf life 18 months from date above)
NO WARRANTY, EXPRESSED OR IMPLIED, INCLUDING
PATENT WARRANTIES OF MERCHANTABILITY OR FITNESS
FOR USE, ARE MADE WITH RESPECT TO THIS PRODUCT.



PRECAUTIONARY STATEMENTS

HANDLING & STORAGE

Handling: Do not breathe the mist, vapors or spray. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves, protective clothing, eye protection and face protection. In case of inadequate ventilation wear respiratory protection. Keep container closed when not in use. Do not reseal if contaminated. Keep away from heat and flame.

Storage: Store in tightly closed containers in cool, dry and well-ventilated area away from heat or sources of ignition. Keep out of direct sunlight.

Storage Temperature: 60°F - 90°F (15.6°C – 32.2°C).

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: Wear a face shield and chemical safety glasses or goggles.

Skin Protection: Wear impervious gloves. Cover exposed skin.

Respiratory Protection: For airborne exposure above the exposure limit(s), wear a NIOSH approved air-purifying respirator equipped with organic vapor cartridges. For situations where the atmospheric levels may exceed the level for which an air-purifying respirator is effective, use a positive-pressure air-supplying respirator.

FIRST AID MEASURES

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.

Skin Contact: Wash with plenty of soap and water. Remove contaminated clothing and shoes. If skin irritation or rash occurs, get medical attention.

Inhalation: Move to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms, call a poison center or physician. Symptoms can be delayed for several hours.

Ingestion: If person is conscious, wash out mouth with water. Do not induce vomiting unless instructed to do so by a poison center or physician.

In Case Of Spill or Leak: Isolate the hazard and deny entry to unnecessary and unprotected personnel. Do not walk through or otherwise scatter spilled material.

Small spills: Absorb with dry chemical absorbent, earth, sand or any other inert material. Allow to stand uncovered 48 hours before closing container. **Large spills:** Create a dike or trench to contain product. Follow same procedure as for a small spill.

For best results, bring liquid to room temperature 68 - 72°F (20 - 22.2°C) just before use. Install when outdoor temperature is 50°F (10°C) or above and will not drop below that for at least 12 hours. If it is 50 - 55°F (10 - 12.8°C) then cure time can be up to 48 hours. Do not install if rain is expected within 12 hours. Do not cover treated area with plastic. Rope off treated area to protect it from people and animals. Within 4 - 6 weeks, inspect surface for loose stones. Repair promptly. Repeat inspection and repair annually. For repair methods, contact Cell-Tek Geosynthetics at 888-851-0051 or visit www.celltekdirect.com.

INSTALLATION INSTRUCTIONS

Be careful not to drip Gravel-Lok on any adjacent pavements, flagstones, etc. It can stain permanently. If you see a drip, wipe it up immediately with acetone and a clean cloth. Once cured, it is a permanent stain.

Do not use a sprayer. Gravel-Lok is too thick.

Clean and dry stone thoroughly. Stone must be free from any fines or dirt. Cleaner stone will create a stronger bond. This process is done best in advance to allow for proper drying time.

Do not use more liquid than recommended as it may cause foaming. Foaming is a sign that too much liquid is being applied.

Coverage rates can vary. Larger stones may require less liquid. Absorbent stones require more liquid. It is best to do a test area or experiment with the product in advance to determine the ideal ratio.

- Excavate and shape foundation soils to proper grade and depth depending on which Gravel-Lok system you are installing. See CADS tab at www.celltekdirect.com. Make sure subgrade is prepared to 95% compaction.
- Always install a non-woven geotextile fabric onto the soil below any bonded stones and base materials as a separator / barrier.
- ALL pavements need a foundation and edge restraint. Our LSG Series® Load Support Grid is recommended. Visit www.celltekdirect.com for more information.
- For stonescaping around shrubs and trees (instead of mulch), concrete layovers, and bonded gravel in the joints between flagstones it is best to use the MIX method of installation. See below. Call us for extra tips for installing in small or shallow areas.
- For concrete layovers, concrete must be clean and dry. Working in small areas, apply a roll coat of the liquid to the concrete. Before it cures, spread out and trowel the stones that have been mixed with the liquid. (see MIX method instructions below).
- Take the extra time to trowel to a smooth finish. If stones are sticking up, they are more vulnerable to become loose.

(A) MIX METHOD:

Do a test to determine correct mixing ratio. Ratio should be approximately 20 - 24 oz. to a five gallon bucket of stones (not filled to top; filled to 5 gallon mark). Starting with a ratio of 20 oz. liquid per five gallon bucket of clean, dry stone, mix liquid with stones and spread out at 1-1/2" thick on a piece of cardboard or wood. Allow to rest for 5 - 10 minutes. Remove gravel. If the liquid has dripped onto the cardboard or wood then the mixing ratio is correct. If not, repeat using an extra ounce of liquid for each mix ratio test until desired result.

The typical coverage rate is about 93 square feet per five gallon container (18 - 19 sf per gallon). This is based on mixing 20 oz. of liquid with a five gallon bucket of pebbles and troweling it out at 2" thick. The mix ratio may vary depending on the stone size and absorbency. Once correct mix ratio is determined, mix stones with liquid. Toss gently to coat them until they are wet. This can be done in a five gallon plastic bucket, wheelbarrow, or cement mixer. Cement mixer can be cleaned up with acetone before liquid cures.

Working in small areas, pour out the coated stones, level and trowel to a smooth finish to desired thickness, typically 2" thick. Allow 24 hours to cure. (cont'd on next page)

(A) MIX METHOD continued:

Apply 1 - 3 roll coats depending on desired durability. Use a medium sized nap foam paint roller and allow 24 hours cure time in between each roll coat. Coverage rate for a roll coat is about 450 sf per five gallon container (90 sf per gallon).

(B) POUR METHOD:

Stone can be spread out, troweled to level, washed in place, and allowed to dry. Coverage rate for the pour method is approximately 90 - 100 sf per five gallon container (18 - 20 sf per gallon). It is highly recommended that a test area be done first as coverage rates can vary due to system depth, stone size, and porosity of stones.

SPRINKLE Gravel-Lok onto the stones with a plastic watering pail that has small holes in the spout. You may need to drill out the holes to be slightly larger because Gravel-Lok is thicker than water. The liquid should resemble strands of spaghetti when it flows out of the spout. At first, the stones will have a striped appearance. The stripes will eventually blend together.

If the holes are too large then the liquid will form a single strand, like pouring from a hose, and this is **NOT** correct.

Stones need to be at least 2-1/2" deep. If stone depth is shallow, the liquid will pool up and cause foaming. If you see foaming, crush the bubbles to eliminate the foam. Reduce the quantity of liquid you are using. Often times, foaming isn't visible until it's too late. The foam develops where the liquid pools up and can take time to percolate back up through the stone in order to be visible. By then, the foam may have cured and that section needs to be chiseled out and redone. Due to many variables, it is very important to experiment first with a test area to determine and practice the ideal rate of application that will not result in foaming.

This method may require two separate light pours, allowing 24 hours for curing in between each application. It is better to sprinkle lightly and reapply where necessary 24 hours later.

Apply 1 - 3 roll coats depending on desired durability. Use a medium sized nap foam paint roller and allow 24 hours cure time in between each roll coat. Coverage rate for a roll coat is about 450 sf per five gallon container (90 sf per gallon).