

Road-Grade on Steel Road Plates



Aerospace Engineered



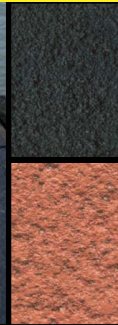
Bridge Deck Expansion Joint



Sprayable



Marina Dock



Roller Applied



Vault Covers

SKIDGUARD

Presents...

The Premium Skid-Resistant Coating

SkidGuard is the result of technology derived from a decade of vigorous polymer science research and team development within the Lockheed Martin Missile and Space Company.

Easy and safe to use, **SkidGuard** is a thin build, single-package, water dispersed, reactive, synthetic polymer resin. It forms a durable, hard, fully-adhered, aggregate filled coating providing excellent skid resistance for steel road plates, for concrete, metal or prime coated wood platforms, ramps and stairs, for steel expansion joints on bridge decks, for marine applications and for many other surfaces in need of skid resistance.

Consider these benefits:

- ⇒ **Single Package:** no limiting pot life factor
- ⇒ **Tenacious adhesion** after proper installation and curing
- ⇒ **Rapid Curing** at modest temperatures: leaves a traffic bearing surface in as few as two hours. Fully cures in 12 hours above 55° F and dry.
- ⇒ **Resistant to** scuffs, bacteria, algae and industrial pollutants.
- ⇒ **Low-Volatile Organic Compound (VOC)**, air quality compliant throughout the United States under all present and pending air quality legislation governing industrial coatings.
- ⇒ **Odor-friendly.** Formulated to minimize applicator impact. Indoor application potential.
- ⇒ **Non-hazardous** in cured form; therefore, may be disposed of into any municipal landfill.

What SkidGuard is:

- ✓ SkidGuard is a **Certified** Non-Skid Coating per **CTM-342** (California test method)
- ✓ SkidGuard is **ASTM C 1028 Certified**
- ✓ SkidGuard is **ASTM D 4541 Tested**
- ✓ SkidGuard is **Successfully Field Tested**
- ✓ SkidGuard is **Made with Recycled Materials**
- ✓ SkidGuard is **Aggregate-Filled**
- ✓ SkidGuard is **Asphalt Based**
- ✓ SkidGuard is **Easy to Apply with Roller or Spray Application**
- ✓ SkidGuard is **Single Component**
- ✓ SkidGuard is **Cost Effective**
- ✓ SkidGuard is **Environmentally Friendly**
- ✓ SkidGuard is **Safe to Use**



Available in:
5 gallon pails
30 & 54 gallon drums

CarbonSeal-FR
TractionSeal
ARM Slurry
S.A.M.I.
RoadSurfacer
GrimePrime
GatorGuard
RoadWeld

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SKIDGUARD

A Guide for Preparation, Application, Storing and Handling (Steel Surfaces)

I. Preparation

There are two methods by which to prepare the steel surface before coating with SkidGuard. Each may be used for first application (never coated plate) and subsequent touch-up (anywhere the coating has been removed/worn-off) applications as necessary.

- A. Sandblasting – This shall be a ‘Near-White Metal Blast Cleaning’ in accordance with the Society for Protective Coatings standard SSPC-SP 10/NACE No. 2.
- B. Chemical Cleaning – This shall be surface preparation according to the ‘Pickling’ method as outlined in SSPC-SP 8. The use of cleaning agents such as Naval Jelly, Evapo-Rust™ or DeRust - Gel™ may be used per section 5.2.5 of this method. Refer to individual product directions for use. Dispose of all waste by-product from this method in accordance with any local law or federal regulations.

If water is used as final cleaning assure surface is completely dry before proceeding with application as the porous nature of steel tends to sweat moisture from its substrate. Forcible drying by propane torch is recommended to test that all moisture has been removed.

II. Application

Stir the SkidGuard to get a uniform mix throughout. This is best accomplished by use of mixing blade attached to hand held drill motor. Never shake the pail as this will not achieve proper dispersing of ingredients.

Tape off any areas of the plate that should not be coated (identifying markings, areas to be welded later, grappling holes/hooks etc.).

SkidGuard shall be applied air temperatures are between 55°F - 115°F, surface temperatures between 55°F - 125°F. Coating must have a minimum curing window of 8 hours before temperature drops below 55°F. On very hot days, it is recommended to coat in the mornings. Avoid applying when rain or other moisture is possible during the curing window. Curing typically will take between 5 – 12 hours depending on temperatures during and after application.

Paint Roller - Fill a ¼” nap roller with SkidGuard by immersing it into the pail. Roll-apply the SkidGuard. No pressure is needed. Let the roller do the work. Try to apply the material in one or two passes in order to uniformly place aggregate. Rolling over the same area again and again may leave an inconsistent finish. Simply roll out the “ridges” to make sure you have a uniform coat. Allow to dry.

Roller applications of SkidGuard is a two-coat process so think of the first coat (~1.00 gal./100 sq. ft.) as a moderate primer. The bulk of the finished coating will come on the second coat (~1.25 gal./100 sq. ft.). Allow first coat to dry before additional coats. Best results are achieved by applying the second coat at a right angle to the first coat.

Spray – Use only approved spray equipment adaptable to the aggressive, abrasive nature of SkidGuard. Material may be applied in single coat range between 2.25 – 3.00 gal./100 SF. Pressure by which SkidGuard is shot out of sprayer must be high enough to achieve atomization for uniform coating but not too high as to allow aggregate to ‘bounce’ out of containment of finished film.

To achieve coefficient of friction values per CTM 342 the SkidGuard must be applied at a minimum spread rate of 2.25 gallons/100 SF (equals nominal 25 mils dry film). If longer service cycles are desired the SkidGuard may be applied in multiple coats to a maximum total spread rate of 5 gallons/100 SF.

III. Storing

Never store SkidGuard in direct sunlight. It is best to store indoors between 40° – 95°F. Do not expose to freezing temperatures.

IV. Handling

While SkidGuard is non-hazardous and engineered with environmental and user safe chemistry, it is recommended that gloves be worn and eye protection be used. Review MSDS for expanded handling guidelines.

Tools clean up after use with cold water.

After the residual material has cured, the empty pails may be disposed of in any municipal landfill.

For further information or questions call Carbonyte Systems, Inc. at 916-387-0316

TECHNICAL DATA SHEET

SKIDGUARD

SKIDGUARD is a thin build, single-package, water dispersed, reactive and synthetic polymer resin. **SKIDGUARD** is an extreme duty industrial surfacer, designed to be applied as a slide protecting top coat over surfaces requiring skid resistance. **SKIDGUARD** forms a durable, hard, fully-adhered, aggregate filled coating. Standard colors available in white, gray or black.

Available in 5 and 55 gallon containers and bulk.

ADVANTAGES:

- Single package – no limiting pot life factor.
- Tenacious adhesion after proper installation and curing.
- Rapid curing at modest temperatures leaves a traffic bearing surface in as few as two hours. Fully cures in 12 hours above 55° F and dry.
- Resistant to scuffs, bacteria, algae and industrial pollutants.
- Low-volatile organic compound (VOC), air quality compliant throughout the United States under all present and pending air quality legislation governing industrial coatings.
- Odor-friendly. Asbestos-free. Formulated to minimize applicator and building occupant impact. Indoor application potential.
- Non-hazardous in cured form; therefore, may be disposed of into any municipal landfill.
- May be spray, roller or squeegee applied. Consult CSI or distributor for spray equipment specification.

USES:

- **SKIDGUARD** is designed to be used as a wearing surface near building entries with inclined or smooth walkways that can become slick when dust or moisture is present.
- Shop floors that have lubricant spills posing a slip hazard.
- Steel Road Plate coverings for vehicular traffic.
- Large traffic stripe markings.
- Footpaths on built-up roofs.
- Metal bridge decks.
- Man hole & vault covers.

STORAGE AND HANDLING:

- **Keep out of reach of children.**
- **Do not allow to freeze prior application.**
- Do not thin or mix with any other products.
- Do not store near heat or open flame.
- Avoid prolonged skin contact and breathing of vapor.
- Keep containers tightly sealed when not in use.
- Do not take internally. Do not induce vomiting if swallowed—call a physician immediately.
- Store, handle and dispose per MSDS requirements.

Call CSI for sales, technical assistance and to request engineer certified

ASTM test result documents:

(916) 387-0316

dcoe@carbonyte.com

www.carbonyte.com

SHIPPING INFORMATION:

Container Size	Units Per Pallet	Area Per Pallet	Weight Per Pallet	Pallet per 48" Trailer
5 gallon pails	32	48 ft ³	2025 lbs	22
55 gallon drums	4	58 ft ³	2800 lbs	18

PHYSICAL PROPERTIES:

Tensile Strength - Elongation	> 100 psi - 40%	ASTM D-2370
Water Absorption	< 1%	ASTM D-570
Weight per gallon	11-12.5 lb / gal	ASTM D-1475
Cured Film thickness per gallon	~ 10.5 mils (non-aggregate filled)	ASTM C-836
VOC	< 15 grams/liter	BAAQMD Vol 3 Lab 22

APPLICATION:

SKIDGUARD may be applied at or between 55° F and 115° F. Must have a minimum curing window of 8 hours before temperature drops below 55°F. Apply over a clean, dry surface, free of unsound materials and/or contaminants that would inhibit bonding. **Do not allow to freeze prior to full cure.**

Prior to application over existing roof surfaces, repair all large splits, holes and/or ruptured blisters wherein the underlying plies have fractured or have been cut during repair by three coursing with CSI's **InfraSeal** and 777-Polyester scrim; then allow to cure.

Moisture can be present in surfaces like concrete for several days so allow 3-4 days after rain or sprinkler depositing before application. Also, it is advisable to apply material on concrete surfaces in no more than two thin applications so the concrete may breathe.

On metal surfaces, reduce to a minimum rust, cutting lubricants or oxidation before application. Any cleaning agents must be thoroughly flushed to eliminate any residues.

To assure homogeneity, stir **SKIDGUARD** slowly and well before use. Some aggregate may settle during shipment but should easily disperse with a manual dowel or hand mixer. Avoid trapping excessive air in mixture to minimize pin-holing. Apply as follows:

Over concrete or other porous surfaces:

Roll or spray an even coat at a rate of 1-1.8 gallons per 100 square feet. A second application of 1 gallon or less per 100 square feet may follow once the first application is dry to the touch. **Primer suggested on concrete & wood.**

Over metal or non-porous surfaces:

If heavy aggregate type is used, material that is roll applied with a tight nap roller should be applied as a single pass. Multiple passes may displace the aggregate producing an irregular pattern. Spray apply either by overlapping pattern or perpendicular fashion. Typical spread rates of each application will be 1.25 gallons per 100 square feet. Two coat application recommended.

Clean implements, including hoses, with cool water immediately after use. SkidGuard may crosslink if left standing in sun exposed black spray hoses.

TRANSPORTATION:

DOT: Not regulated

MATERIAL SAFETY DATA SHEET

MANUFACTURER:

Carbonyte Systems, Inc.
3 Wayne Court Suite A
Sacramento, CA. 95829
(916) 387-0316

****HMIS:** Health -1
Flammability -0
Reactivity -0
Personal Pro. Equip. -A

Emergency/Information Phone:
CHEMTREC 800-424-9300

*Hazardous Materials Identification System
adopted by the National Paints & Coatings
Association (NPCA)

Date of Preparation: February 10, 2010

SECTION I. PRODUCT IDENTIFICATION

PRODUCT: Hydrocarbon Emulsion
PRODUCT CODE: **SkidGuard (Black, Blue)**
PRODUCT CLASS: Polymer Modified Asphalt Emulsion CAS# : Mixture

SECTION II. HAZARDOUS INGREDIENTS

INGREDIENTS	OCCUPATIONAL ACGIH TLV	EXPOSURE LIMITS	VAPOR	
CAS NUMBER	% TWA STEL	OSHA PEL	PRESSURE	
Petroleum Asphalt	< 50	None	5 mg/m	< 1 mm Hg @ 20
CAS# 8052-42-4				
Co-Polymer Latex	<10	None Established		of water
CAS # Proprietary				
Synthetic Rubber	< 40	None		n/a
CAS # Proprietary				
Inorganic Fillers	< 55	None		n.a.
CAS # Proprietary				
Surfactant	< 2	None		n.a.
CAS # Proprietary				

SECTION III. PHYSICAL DATA

BOILING POINT: ~100 C
VAPOR DENSITY: X Heavier than air Lighter than air
EVAPORATION RATE: Of Water
% VOLATILE BY VOL: 12-50% **DENSITY:** 9.0 - 13.0 lbs./gal. **pH:** 7 -10 **SP. GR.** 0.9 – 1.3
APPEARANCE/ODOR: Various colors, flowable liquid, pleasant sweet odor
SOLUBILITY IN WATER: Miscible **V.O.C.:** <10 grams / liter

SECTION IV. FIRE AND EXPLOSION DATA

FLAMMABILITY CLASSIFICATION:OSHA: Not Regulated
FLASH POINT: None
EXTINGUISHING MEDIA: Dry Chemical & CO2; for dry polymer.
UNUSUAL FIRE AND EXPLOSION HAZARDS: None
SPECIAL FIRE FIGHTING PROCEDURES: Dried polymer burns under influence of outside flame source but will self-extinguish at temperatures below ~80° F. By-products of combustion may include, carbon monoxide, traces of oxides of nitrogen, aliphatic and aromatic hydrocarbons, hydrogen bromide, water, and traces of styrene acrylic monomer. By-products of pyrolysis may include acetic acid, acrolein, and acetaldehyde. Wear positive pressure, self-contained breathing apparatus (SCBA) during fire or cleanup.

SECTION V. REACTIVITY DATA

STABILITY: Unstable X Stable
HAZARDOUS POLYMERIZATION: May Occur X Will Not Occur
HAZARDOUS DECOMPOSITION PRODUCTS: None Known
INCOMPATIBILITY: Product will react violently with any water sensitive material such as sulfuric acid or alkali materials such as sodium or metal hydrides. May react with strong oxidizing agents such as hydrogen peroxide or permanganates resulting in intense heat, boiling, flame development, explosion or toxic gas generation.
CONDITIONS TO AVOID: Do not store at temperatures below 0 or above 100F

SECTION VI. HEALTH HAZARD DATA

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Irritant to mucous membranes. May provoke asthmatic response in persons with asthma who are sensitive to airway irritants.

SKIN & EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Irritant to eyes and to the skin of some individuals. Wash skin with plenty of water; if splashed in the eye, flush with water for 15 minutes.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE: Ingestion of this material is not expected to occur through normal use. Accidental ingestion of more than one ounce may cause irritation. Contact a physician should ingestion occur.

ACUTE AND CHRONIC HEALTH HAZARDS: Product may contain trace amounts of vinyl acetate which has been shown to cause tumors of the respiratory tract of laboratory animals. There is no evidence that it has caused cancer in humans.

TARGET ORGANS AFFECTED: Upper respiratory tract.

CARCINOGENICITY: NTP? NO IARC MONOGRAPHS? NO OSHA REG.? NO

SUBSTANCES LISTED IN STATE OF CALIFORNIA PROP. 65: Petroleum asphalt may contain trace amounts of benzene (CAS # 71432). Contains trace amounts of residual acrylate an styrene monomers and <0.1% residual acrylamide monomer and formaldehyde. Contains ammonia <0.1% max.

EMERGENCY AND FIRST AID PROCEDURES: If inhalation of vapors causes irritation of respiratory tract, remove victim to fresh air and seek medical advice. In the event of skin contact wash skin with water and soap. If splashed in eye, flush 15 minutes in eyewash and seek medical advice. If swallowed into stomach DO NOT induce vomiting or aspiration. Call a physician.

SECTION VII. PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Absorb spill with appropriate absorbent material such as sand, sawdust, clays, etc. Dike and contain spills; transfer liquid to containers for recovery or disposal. Do not dump in sewers, on ground, or into any body of water.

WASTE DISPOSAL METHOD: Dispose of in accordance with prescribed federal, state, and local regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: This product is stable under normal use and storage conditions. Keep out of reach of children. Recommend storage at temperatures above 0 and below 100 F. Use with adequate ventilation.

SECTION VIII: CONTROL MEASURES

RESPIRATORY PROTECTION: Not required for outdoor application. If odors become noticeable or respiratory irritation occurs during application use NIOSH/MSHA approved respirator for organic vapors, at employee discretion.

VENTILATION: Ensure adequate supply of fresh air at all times. If buildup of vapor causes irritation, use mechanical ventilation sufficient to eliminate the vapor which causes the irritation.

PROTECTIVE GLOVES: Nitrile rubber (Buna N) if required to prevent repeated or prolonged skin contact.

EYE PROTECTION: Wear chemical goggles at all times when handling this product.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear approved respirator, gloves, hat, shoes, and long-sleeved clothing to prevent contact with the material.

SECTION IX: SPECIAL PRECAUTIONS

Precautionary Statements: None

Other Handling and Storage Requirements: None

SECTION X: ADDITIONAL REGULATORY CONCERNS

DOT: Not Regulated

TSCA: Ingredients in this product are certified for inclusion in the Toxic Substances Control Act of inventory of chemical substances.

OSHA: Product contains material as defined by 29CFR Paragraph 1910, 1200. Components of product are not listed by the National Toxicology Program, the International Agency for Research on Cancer, nor the Registry of Toxic Effects of Chemical Substances (1981-82) as a carcinogen.

SARA Title III: Product contains the following listed toxic chemicals which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) and 40 CFR, Part 372.

<u>Listed Toxic Chemical</u>	<u>CAS #</u>	<u>Max % by Wt.</u>
None	N/A	N/A

For technical information regarding performance of this product, call **Carbonyte Systems, Inc. at (916) 387-0316 or Fax (916)381-2617**

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