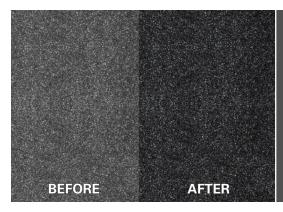


# RestoraSeal 3515

Technical Data Sheet (TDS)



- Restores color and weatherproofs exposed aggregate.
- Dries hard. Will not attract dirt, airborne dust or grime.
- Reduces moisture entry into asphalt surfaces to prevent water damage.
- Quick drying time. Dry to the touch in 30-40 minutes.\* (see Physical Data section)
- Protects against chemicals inluding oil, gas, anti-freeze, brake fluid, etc.
- Retains color due to excellent UV and Oxidation resistance.

#### PRODUCT DESCRIPTION

RestoraSeal 3515 is a high performance Nano-Polymer Revitalizer and Sealer which impregnates asphalt with a protective structure that waterproofs, seals, and restores asphalt, leaving a fresh black hue. RestoraSeal 3515 penetrates deeply into the asphalt pores providing durability and protection against UV, water, salts, oxidation, and chemicals (including oil, gasoline, antifreeze, and brake fluid). RestoraSeal 3515 contains no silicones, waxes, or oils and when applied properly will not yellow, chip, or peel. This formulation has been created with a new generation of NanoPolymer technology that creates a protective barrier that will outperform comparable solvent-based products. Treated surfaces shed water, dirt, soot and chemical contaminants to resist staining and intrusion damage to the matrix. Because of the unusual characteristics of this formulation, it may be used for many different applications.

#### **STORAGE**

Keep well sealed containers in a cool, dry place. Avoid contact with sources of extreme hot or cold temperatures as well as direct sunlight. Containers should be stored at 45°F to 90°F. Shelf life is one (1) year if exposed to the above conditions.

#### **SAFETY**

Prior to commencing work, carefully read and follow all SDS (formerly MSDS), Technical Data Sheets, and any instruction manuals for products and equipment used during installation. Following the safety regulations of jobsite, local, state, and federal authorities is the responsibility of the installation company, general contractor, and/or facility owner.

#### **BASIC USES:**

RestoraSeal 3515 is used to provide protection against various elements that degrade asphalt and to restore the aesthetic to a fresh black quality. RestoraSeal 3515 will also protect against soiling by airborne contaminants or other materials, which by absorption would cause unsightly substrate discoloration. RestoraSeal 3515 offers surface protection, color enhancement, and repellency to water, chemicals, and oxidation.

#### PRIMARY CAUSES OF ASPHALT DAMAGE:

Asphalt is composed of sand, rock, and aggregates, which are all held together by the binder (bitumen). Even when asphalt is properly placed, the following factors are major causes of asphalt damage. Most of these causes are factors that break down the asphalt binder. When that occurs, there is then nothing holding the sand, rock, and aggregates together. So, raveling occurs on the asphalt surface. Lots of loose gravel is a sign of binder degradation.

- **UV Rays (Ultraviolet Radiation)** damage asphalt by hardening the bitumen, causing a loss of flexibility. The sand, rock, and aggregate fall apart under load (traffic).
- Oxidation- Oxygen exposure over time will promote oxidation if asphalt isnt sealed. It can also cause a break down in the asphalt by hardening the bitumen (binder), making it lose flexibility. This loss of flexibility causes cracks under vehicle loads.
- Water, like UV rays, hardens the bitumen. Water is absorbed by the asphalt due to its porosity, and can accelerate surface erosion and deepen cracks by erosion. Water can cause softening of sub-layer compaction, which causes cracks under heavy loads.
- Chemicals- Salts, Oil, Gas, AntiFreeze, Brake Fluid, and other chemicals can be damaging if it has had time to soak and permeate into the asphalt's surface, slowly destroying the elastic properties of the bitumen. This causes the asphalt to progressively crumble (especially where motor oil inseminated the surface). If the oil stain is fresh and guickly cleaned up, it will not cause permanent damage to the surface.

#### PRIMARY CAUSES OF ASPHALT DAMAGE (CONTINUED):

• **Heavy Traffic** can cause cracks in the asphalt if it has started to oxidize. Freight trucks, garbage trucks, bulldozers, fire trucks, or any other extra large vehicle will put a strain on asphalt. By minimizing bitumen attack as well as heavy traffic, the lifespan of the asphalt will be prolonged.

Of the mentioned causes above, RestoraSeal 3515 directly protects against all primary causes and indirectly protects against heavy traffic through the protection of the bitumen. As a Nano-Polymer Revitalizer and Sealer that fully weather-proofs asphalt, certain limitations were met with protection against physical damage.

## PHYSICAL DATA:

**COLOR:** Asphalt Black (BK6A)

ODOR: N/A (Very Low)

V.O.C CONTENT: Less than 40g/L

TOTAL COATS: 1 or more (typical is 2 coats)

**THEORETICAL COVERAGE:** 200-500 Ft<sup>2</sup>/ Gallon per application (Depends on Porosity)

DRY TIME: \*(Depends on Air Temperature, Substrate Temperature, Humidity, Porosity, Dryness of Surface, Application

Rate, and Air Movement):

Typical Values @ 77°F, 50% RH, Slight Breeze

To Touch: 30-40 Minutes Light Traffic: 2-3 Hours

Normal Traffic: 4-8 Hours Maximum Hardness: 7 Days

The dry time and the cure time of RestoraSeal 3515 are two separate but related factors. RestoraSeal 3515 will first dry and then will begin to cure. Several environmental factors will affect the dry time such as air temperature, substrate temperature, application rate, substrate porosity, humidity, and air movement (wind). During the curing phase, properties like strength and chemical resistance will begin to increase. Once dry, the rate of cure continues to be affected by air temperature and substrate temperature but is less dependent on the humidity and air movement.

#### **INSTALLATION**

#### **SURFACE PREPARATION**

Performance is directly related to the quality and degree of cleaning and surface preparation. Prior to installation, all surfaces must be clean and free of all contaminants. It is alright for the substrate to be damp before application, but not wet. For more specific information, consult the surface preparation section contained in the Application instructions.

### **APPLICATION**

See Application Instructions for complete information on surface preparation, equipment, environmental conditions, application procedures, and safety precautions. For conditions outside the specifications or limitations described, contact Wolverine Coatings Corporation for details.

## SUBSEQUENT APPLICATIONS

Additional coats of RestoraSeal 3515 may be applied as soon as it can be walked on without damage. Consult "Recoat Time" in "Liquid Phase Physical Data" for guidelines. Be advised that project conditions (including air temperature, substrate temperature, relative humidity, thickness of previous coat, and degree of dryness of the substrate) will influence the "Re-coat Time".

#### **MAINTENANCE COAT**

If desired, an additional maintenance coat may be applied over the pre-existing coating to freshen up the color and weatherproof attributes, and to give coverage to any areas where cracks were patched.

## **INSTALLATION (CONTINUED)**

#### **CLEANING AND MAINTENANCE**

A few maintenance recommendations to keep asphalt in prime condition:

- Maintain proper drainage to prevent standing water
- Repair cracks before they enlarge and spread
- Clean up any oil spills
- Run sweeper and vacuum trucks

#### **PRODUCT LIMITATIONS**

While this can be applied to damp surfaces, do not apply to wet surfaces, as this can cause poor bonding or blushing (milky white or frosty appearance).

Differences in porosity and non-uniformity of application might affect the even distribution of RestoraSeal 3515. Uneven application can change the light refraction characteristics of the surface giving the visual effect of a non-uniform color. In this case, apply an additional coat of RestoraSeal 3515.

Application will give the colored surface an asphalt black appearance. Always coat a test area to determine acceptability and to assure desired aesthetic results.

#### **DISCLAIMER**

This document does not purport to address all applicability and safety concerns, if any, associated with its use. It is the responsibility of the user to determine applicability of the information and products, and to establish appropriate safety practices.

#### **SHIPPING DATA**

Packaging - 5 Gallon Pails, 55 Gallon Drums, 330 Gallon Totes

#### **SAFETY**

For your safety, all required personal protection equipment should be used when operating machinery or handling chemicals. Concrete dust is a source of silica particles and other hazardous materials that can cause silicosis and other illnesses. Proper safety equipment and methods are the responsibility of the installation company, general contractor, and/or facility owner.

#### WARRANTY

Wolverine Coatings Corporation warrants its products to be free from defects in material and workmanship. Wolverine Coatings Corporation's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at Wolverine Coatings option, to either replacement of products not conforming to this Warranty or credit to the Buyer's account in the invoiced amount of the nonconforming products. Any claim under this warranty must be made by the Buyer to Wolverine Coatings in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the ship date, whichever is earlier. Buyer's failure to notify Wolverine Coatings of such nonconformance as required herein shall bar Buyer from recovery under this warranty.

Wolverine Coatings makes no other warranties about the product. No other warranties, whether expressed, implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply.

Any recommendation or suggestion relating to the use of the products made by Wolverine Coatings, whether in its technical literature, or in response to specific inquiry or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyers having requisite skill and know-how in the industry, and therefore it is for the Buyer to satisfy itself of the suitability of the products for its own particular use and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment, changes in procedure of use, or extrapolation of data may cause unsatisfactory results.

#### LIMITATION OF LIABILITY

Wolverine Coatings Corporation's liability on any claims based upon Wolverine Coatings Corporation's negligence or strict liability, for any loss or damage arising out of, connected with, or resulting from the use of the products, shall in no case exceed the purchase price allocable to the products or parts thereof which give rise to the claim. In no event shall Wolverine Coatings Corporation be liable for consequential or incidental damages.

#### LITERATURE REVISION - TDS: RestoraSeal 3515 - Rev. 191203

Published literature is subject to change without notice. Wolverine Coatings Corporation is constantly engaged in the testing of existing formulations, the development of new innovative technologies, and the evaluation of the latest practices. The latest literature should always be consulted at www.wolverinecoatings.com.



# **Wolverine Coatings Corporation**

5969 Highway 221 | Roebuck, SC 29376 Tel: (864) 587-3144 | Fax: (864) 587-3147 e-mail: sales@WolverineCoatings.com website: www.WolverineCoatings.com