



Vandalism or Public Art?



Inscriptions “decorating” subways and buses, buildings and other structures, i.e. various types of graffiti, are now part of normal, everyday street scenes in Western societies, especially urban centers. Though many consider them to be expressions of creativity, the wider public sees them as signs of social unrest, aggressivity and frustration.

While some of the early examples of graffiti possessed certain artistic qualities, the majority today can be classified as vandalism. Simple “tags” (normally indecipherable stylizations of the tagger’s initials) and carelessly sprayed or scribbled pictures or slogans mark the appearance of both public areas and private property.

THE DAMAGE IS MORE THAN JUST VISUAL.

Graffiti and other attacks with paint are initially considered to be mere nuisances. However, repeated cleanings of popular targets can result in considerable long-term damage to the substrate.

In addition to such subsequent damage, municipal administrations, public transport authorities and owners of real estate are confronted with exorbitant cleaning or reconstruction costs year after year. The problem can become a wearisome and extremely expensive battle for the party responsible for the property’s maintenance.

For this reason, adapting graffiti prevention to specific uses has become extremely important.

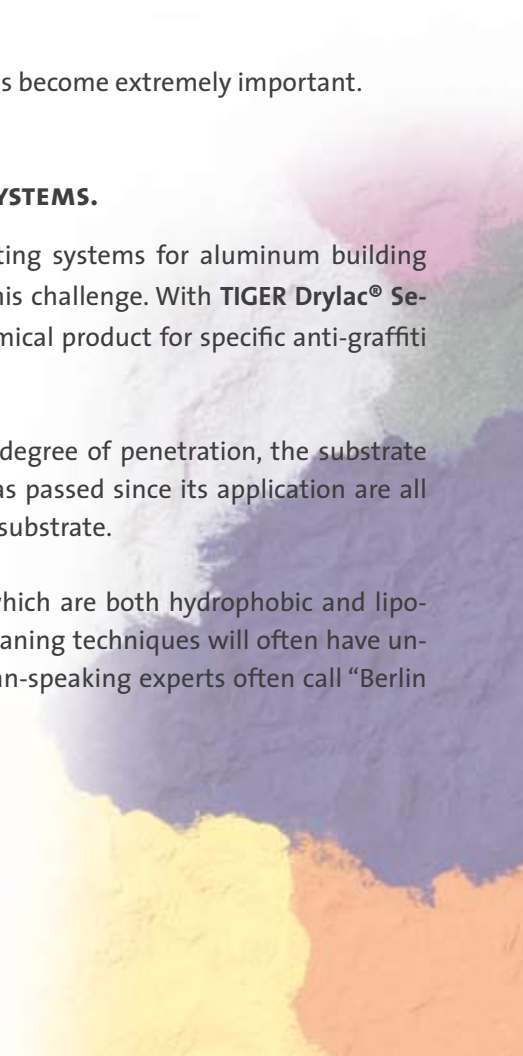
PREVENT NOW RATHER THAN PAY LATER.

LONG-TERM PROTECTION WITH INNOVATIVE COATING SYSTEMS.

TIGER, a leading international manufacturer of powder coating systems for aluminum building components for façades and steel structures, has taken up this challenge. With **TIGER Drylac® Series 44 Anti-Graffiti**, we can offer you an effective and economical product for specific anti-graffiti applications.

The type and consistency of the paint or colorant used, the degree of penetration, the substrate porosity, the type of graffiti and the length of time which has passed since its application are all significant factors which affect the amount of damage to the substrate.

Smooth, relatively non-porous and homogeneous surfaces which are both hydrophobic and lipophobic mean easier clean-ups. Insufficient coordination of cleaning techniques will often have unsatisfactory effects and result in an appearance which German-speaking experts often call “Berlin clouds.”



TIGER. The Coating. The Object.

Effective. Economical. Reliable.

TIGER Drylac® Series 44 Anti-Graffiti can be used to produce surface finishes which, when the proper cleaning technology is used, are nearly immune to all types of graffiti. This permanent protection system has been designed to withstand numerous clean-ups, and its appearance will be virtually unaltered, even after use of a chemical cleaner.

Sprayed paint can be removed without a trace, even after repeated clean-ups, though a slight reduction in the degree of gloss is possible. Inscriptions applied with marking pens will disappear almost completely.

PROVEN EFFECTIVENESS.

TIGER Drylac® Series 44 Anti-Graffiti powder coating was tested by the Dr. Kupfer laboratory of Berlin. The methods used were similar to the stress test developed by the "Gütegemeinschaft Anti-Graffiti e.V. association", Berlin.

Excellent results were obtained with **TIGER Drylac® Series 44 Anti-Graffiti**, even after numerous cleaning cycles. It was demonstrated that this product is suitable for permanent graffiti prevention under actual conditions.

Easy use.

Biolon G, manufactured by Silco-Tec, was chosen as the cleaner. The cleaning process includes the following steps:

- application of the liquid cleaner with a brush
- waiting approximately five minutes for the cleaner to act
- loosening the paint with the brush
- removing the solvent solution and the paint remnants with a soft absorbent cloth
- rinsing off the remaining solvent with water
- drying the surface with a soft absorbent cloth

Many years of effectiveness.

The following is necessary for ensuring long-term effectiveness of the anti-graffiti coating under actual conditions:

- select a suitable cleaner
- remove the graffiti as soon after application as possible
- remove the cleaner from the coating as soon as it has had time to act
- make sure that the loosened paint does not run over clean areas
- rinse the cleaned areas with water



CLEANING OF COATED (SERIES 44) SURFACE, STAINED WITH GRAFFITI



SUBWAY BERLIN



Product & technical specifications



TIGER Drylac® Series 44 Anti-Graffiti is a polyurethane-based coating. It's surface is made outstanding by the following qualities:

- easy to clean
- highly resistant to weather and corrosion
- excellent flow
- smooth flow - glossy surface, 80-95*
- both opaque and transparent effects are available

Colors

TIGER Drylac® Series 44 Anti-Graffiti is available in almost all shades and with a smooth-flow, glossy surface finish.

Substrates

TIGER Drylac® Series 44 Anti-Graffiti is a powder coating suitable for all substrates such as:

- aluminum
- hot dipped galvanized steel
- blank steel

Examples of typical applications

- metallic facades
- interior metallic surfaces
- vehicles for public transport
- noise-protection walls



Projects (excerpt)

School in Kreuzberg, Berlin

Subway construction, Berlin

Noise-protection walls, German Federal Railway, Stralsund, Germany

Pulverbeschichtung Schreiner, Grebenau, Germany
Bongard Stahlschutzplanken & Lärmschutzsysteme,
Nentershausen, Germany

Noise-protection walls, German Federal Railway, Troisdorf, Germany

HKR Systembau, Berlin

Glastech-Oberflächentechnik, Berlin

ALUSYSTON GmbH, Düsseldorf, Germany

Forster Metallbau, St. Peter, Austria

*Gloss according to ISO 2813-60° angle

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Test results

TIGER Drylac® Series 44 Anti-Graffiti, white

Checked on a chromated aluminum test panel which is 0.7 mm thick.

Cure conditions according to the cure curves. When used as a two-coat system, the increase in film thickness will result in a decrease of mechanical properties.

Please note: Due to the reduced mechanical properties, it is imperative to verify the suitability for the intended application.

TEST RESULTS	TEST METHOD	SERIES 44 Anti-Graffiti white
FILM THICKNESS	ISO 2360	60-80 µm
GLOSS - 60°	ISO 2813	80-95
CROSS CUT TEST 1 mm	ISO 2409	0
IMPRESSION HARDNESS	ISO 2815	≥ 100
MANDREL BENDING TEST	ISO 1519	5 - 10 mm
CUPPING TEST	ISO 1520	≥ 3 mm
MORTAR RESISTANCE	ASTM D 3260	ok
DRILL MILL TEST		ok
KESTERNICH-TEST 30 cycles	ISO 3231	0,2 l SO ₂ - i. O.
WEATHERING	EN 20105 - A02	≥ 4
LIGHT FASTNESS	EN ISO 105 - B02	≥ grade 7
HUMIDITY RESISTANCE 1000 h	ISO 6270-1	max. blistering 1 mm
SALT SPRAY RESISTANCE 1000 h	ISO 9227	max. undercutting 1 mm

CERTIFICATES

Test lab Dr. Kupfer (regd. Quality Assoc. Anti Graffiti, Berlin)

Recommended Cleaner

Bulk Stripper 870GC, Bulk Chemicals Inc.

P.O. Box 186, Mohrsville, PA 19541

Phone: +1 / 800 338 28 55



TRADE SCHOOL IN KREUZBERG, BERLIN





Notes



The “Gütegemeinschaft Anti-Graffiti e.V.” of Berlin is an association of manufacturers, specialized contractors, research institutions, representatives of public bodies and concerned private persons involved directly or indirectly with the problem of graffiti removal or prevention.

The members of this association are all concerned with evaluating materials and technologies for graffiti removal and prevention according to a quality standard and quality and testing regulations formulated on this basis. This is done with the intention of providing orientation in the sometimes confusing field of suppliers. The association’s main purpose is to ensure a level of sufficient quality in products designed to remove or prevent graffiti.

The establishment of this association was accompanied by the introduction of a quality standard for use in technical evaluation of materials and technologies which are not covered by DIN norms of European guidelines relating to the graffiti problem.

For concrete advice and guidelines for evaluating graffiti cleaners, see the Gütegemeinschaft Anti-Graffiti e.V.’s “Technische Vorschriften für die Bewertung von Verfahren, Technologien und Materialien zur Graffitientfernung und Graffitientfernung und Graffiti prophylaxe“ (in German).

www.anti-graffiti-verein.de

TSING YI STATION, HONG KONG



RAL

Deutsches Institut für Gütesicherung & Kennzeichnung e.V.,
(German Institute for Quality Assessment and Designation), D-53757 St. Augustin, Germany

Removal and prevention of graffiti:
see RAL-GZ 841, August 1999

The criteria specified in the following quality guidelines apply to cleaners for removing graffiti from metallic facades:
RAL-GZ 632, December 1987



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NOISE-PROTECTION WALL, TROISDORF (D)



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