

# MATERIAL SAFETY DATA SHEET

## Protectosil® ANTIGRAFFITI



Material no.		Version	4.18 / US
Specification	116768	Revision date	08/27/2011
Order Number		Print Date	04/09/2012
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## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product information

Trade name : Protectosil® ANTIGRAFFITI  
PROTECTOSIL® antigraffiti

Use of the Substance /  
Preparation : For industrial use

Company : Evonik Degussa Corporation USA  
299 Jefferson Road  
Parsippany, NJ 07054-0677  
USA

Telephone : 973-929-8000

Telefax : 973-929-8040

US: CHEMTREC EMERGENCY  
NUMBER : 800-424-9300

CANADA: CANUTEC  
EMERGENCY NUMBER : 613-996-6666

Product Regulatory Services : 973-929-8060

## 2. HAZARDS IDENTIFICATION

### \*\*\* EMERGENCY OVERVIEW \*\*\*

**Form-liquid**    **Color-yellowish orange slightly turbid**    **Odor-almost odorless**

May cause eye, skin and respiratory tract irritation.

### POTENTIAL HEALTH EFFECTS

#### Eye contact

Slightly irritating.

#### Skin Contact

Possibly irritating.

#### Inhalation

Possibly irritating.

#### Ingestion

Possibly irritating.

#### Chronic Health Hazard

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Ethanol: ACGIH TLV: TWA 1000 ppm; OSHA PEL: TWA 1000 ppm. Liquid and high vapor concentrations cause eye irritation. Contact of liquid with skin causes drying, cracking, and irritation. Inhalation causes irritation of the respiratory tract. Repeated or prolonged exposure to high vapor concentrations may cause drowsiness. Excessive or repeated ingestion may cause central nervous system effects, liver effects and reproductive effects. However, ingestion is not an expected route of exposure. Ethanol has a low potential to cause allergic skin reactions; however, undocumented cases of human skin sensitization have been reported. Inhalation of an ingredient in this product has been shown to cause teratogenic effects in laboratory animals.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Chemical nature

Preparation on the base:  
Organofunctional silane system  
and  
water

#### Information on ingredients / Hazardous components

Ethanol			
CAS-No.	64-17-5	Percent (Wt./ Wt.)	>= 1 - < 5 %
Methanol			
CAS-No.	67-56-1	Percent (Wt./ Wt.)	>= 0.1 - < 1 %

#### Other information

This product contains a component that is subject to a TSCA Significant New Use Rule (SNUR). The limitations on the use of this product are that the product may only be used in anti-graffiti systems and the product may not be used in a way that creates a mist, aerosol, or other respirable form of the product. The product may not be sprayed and should be applied to surfaces via brush or roller. If a product containing the regulated component is distributed further it is required that the distributor ensure that these limitations are communicated to downstream users.

This material is classified as hazardous under OSHA regulations.

### 4. FIRST AID MEASURES

#### Inhalation

If aerosol or mists are inhaled, take affected persons out into the fresh air. In case of persistent discomfort or other symptoms, consult a physician immediately.

#### Skin contact

Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Obtain medical attention immediately if symptoms occur. Wash clothing before reuse.

#### Eye contact

In case of contact, immediately flush eyes with plenty of water. Obtain medical attention if irritation develops.

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### Ingestion

If accidentally swallowed, rinse mouth thoroughly with water and afterwards, drink plenty of water. In case of discomfort, obtain medical attention.

### Notes to physician

After absorbing large amounts of substance: Administration of activated charcoal: Acceleration of gastrointestinal passage.

## 5. FIRE-FIGHTING MEASURES

Flash point > 95 °C , > 203 °F  
Method: DIN EN 22 719

Autoignition temperature Not determined.

### Suitable extinguishing media

Use water spray or fog, foam, dry chemical or CO2.

### Special protective equipment for fire-fighters

In case of fire: wear a self contained respiratory apparatus

### Further information

Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure there are sufficient retaining facilities for water used to extinguish fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Containers can build up pressure if exposed to heat (fire). Cool with water spray. As in any fire, wear self-contained, pressure-demand breathing apparatus (MSHA-NIOSH approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Use personal protective equipment.

### Environmental precautions

Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

### Methods for cleaning up

Ventilate area. Absorb spill with inert material and place in a chemical waste container.

### Additional advice

Remove sources of ignition and ventilate area.

## 7. HANDLING AND STORAGE

### Handling

#### Safe handling advice

Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Avoid breathing vapor or mist. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Wash thoroughly after handling.

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### Advice on protection against fire and explosion

Take precautionary measures against static charges, keep away from sources of ignition.

### Storage

#### Requirements for storage areas and containers

Keep containers tightly closed in a cool, well-ventilated place.

#### Further information

Keep tightly sealed in original packing.  
Protect from frost.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Component occupational exposure guidelines

#### • Ethanol

CAS-No.	64-17-5
Control parameters	1000 ppm
	1900 mg/m <sup>3</sup>
	1000 ppm
	1900 mg/m <sup>3</sup>
	1000 ppm

PEL:(OSHA Z1)

Time Weighted Average (TWA)  
Permissible Exposure Limit (PEL):(US CA  
OEL)  
Short Term Exposure Limit  
(STEL):(ACGIH)

### Engineering measures

Provide for good ventilation if vapors/aerosols are formed.

### Personal protective equipment

#### Respiratory protection

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

#### Hand protection

Glove material	for example, butyl-rubber
Material thickness	0.5 mm
Break through time	>= 480 min
Glove material	for example, Fluorinated rubber (Viton)
Material thickness	0.4 mm
Break through time	>= 480 min

The above mentioned hand protection is based on knowledge of the chemistry and anticipated uses of this product but it may not be appropriate for all workplaces. A hazard assessment should be conducted prior to use to ensure suitability of gloves for specific work environments and processes prior to use.

Selection of protective gloves to meet the requirements of specific workplaces.

Suitability for specific workplaces should be clarified with protective glove manufacturers.

Use impermeable gloves.

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### Eye protection

Use chemical splash goggles or face shield.

### Skin and body protection

A safety shower and eye wash fountain should be readily available.

To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

### Hygiene measures

Avoid contact with skin, eyes and clothing. Do not inhale vapors or aerosols. Do not eat, drink, or smoke when using the product. Remove contaminated or saturated clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Form	liquid
Color	yellowish orange
Odor	slightly turbid almost odorless

### Safety data

pH	ca. 4 (1000 g/l) (20 °C)
Melting point/range	-1 °C Method: ISO 3841
Boiling point/range	97 °C (1013 hPa) Method: ASTM D-1120
Flash point	> 95 °C Method: DIN EN 22 719
Autoignition temperature:	Not determined.
Vapor pressure	not determined
Density	ca. 1.06 g/cm <sup>3</sup> (20 °C) Method: DIN 51757
Water solubility	miscible
Viscosity, dynamic	ca. 1.6 mPa.s (20 °C)

### Further information

Other information	Vapors can form explosive mixtures with air.
Solvents and Volatiles Data	% VOC (gm/l) 0

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### 10. STABILITY AND REACTIVITY

Hazardous reactions	No dangerous reactions known.
Further information	Stable under normal conditions. Product will not undergo hazardous polymerization.

### 11. TOXICOLOGICAL INFORMATION

Product Acute oral toxicity	LD50 Rat: > 2000 mg/kg Method: OECD 423
Product Acute inhalation toxicity	LC50 Rat: > 5.5 mg/l / 4 h / Aerosol Method: OECD Test Guideline 403
Product Skin irritation	Rabbit not irritating Method: OECD Test Guideline 404
Product Eye irritation	Rabbit slightly irritating Method: OECD Test Guideline 405
Product Sensitization	(Magnusson-Kligman test) guinea pig: not sensitizing Method: OECD Test Guideline 406
Product Repeated dose toxicity	inhalative Rat Testing period: 90 d No toxicological effects relevant to classification
Product Gentoxicity in vitro	Ames test Salmonella typhimurium no evidence of mutagenic effects Method: OECD TG 471
Component Mutagenicity assessment	Ethanol 64-17-5 This product contains an ingredient that has been shown to produce mutagenic effects in in vivo testing.
Component teratogenicity assessment	Methanol 67-56-1 Potential embryo-foetal toxicity and teratogenicity.
Component General Toxicity Information	Methanol 67-56-1 Material contains methanol. Harmful if inhaled or absorbed through skin; causes damage to liver, kidney and nervous system. Causes eye, skin, nose and throat irritation. May be fatal or cause blindness if swallowed. Cannot be made non-poisonous.

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## 12. ECOLOGICAL INFORMATION

### Elimination information (persistence and degradability)

Biodegradability	Readily biodegradable. 62 % Exposure time: 28 d Method: (CO <sub>2</sub> ; modif. Sturm test / OECD 301 B)
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### Ecotoxicity effects

Toxicity to fish	LC50 Brachydanio rerio: > 1000 mg/l / 96 h Method: OECD TG 203  LC0 Brachydanio rerio: >= 1000 mg/l / 96 h Method: OECD TG 203
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## 13. DISPOSAL CONSIDERATIONS

### WASTE DISPOSAL

Advice on disposal	Waste must be disposed of in accordance with federal, provincial, state and local regulations. Empty containers must be handled with care due to product residue. DO NOT HEAT OR CUT THE EMPTY CONTAINER WITH AN ELECTRIC OR GAS TORCH.
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## 14. TRANSPORT INFORMATION

### Transport/further information

Not dangerous according to transport regulations.

## 15. REGULATORY INFORMATION

### US Federal Regulations

#### OSHA

If listed below, chemical specific standards apply to the product or components:

- None listed

#### Clean Air Act Section (112)

If listed below, components present at or above the de minimus level are hazardous air pollutants:

- Methanol  
CAS-No. 67-56-1

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### CERCLA Reportable Quantities

If listed below, a reportable quantity (RQ) applies to the product based on the percent of the named component:

- None listed

### SARA Title III Section 311/312 Hazard Categories

The product meets the criteria only for the listed hazard classes:

- Acute Health Hazard

### SARA Title III Section 313 Reportable Substances

If listed below, components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

- None listed

### Toxic Substances Control Act (TSCA)

If listed below, non-proprietary substances are subject to export notification under Section 12 (b) of TSCA:

- None listed

### Other US Federal Regulatory Information

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### State Regulations

The Listing requirements of the Right to Know (RTK) legislation varies by state. All information for NJ, PA, MA and other states can be derived from the listing of hazardous and non-hazardous components in section 2 and 15 of this MSDS.

### California Proposition 65

A warning under the California Drinking Water Act is required only if listed below:

- None listed



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### International Chemical Inventory Status

Unless otherwise noted, this product is in compliance with the inventory listing of the countries shown below. For information on listing for countries not shown, contact the Product Regulatory Services Department.

• Europe (EINECS/ELINCS)	Listed/registered
• USA (TSCA)	Listed/registered
• Canada (DSL)	Not listed/Not registered
• Australia (AICS)	Not listed/Not registered
• Japan (MITI)	Not listed/Not registered
• Korea (TCCL)	Not listed/Not registered
• Philippines (PICCS)	Not listed/Not registered
• China	Listed/registered

## 16. OTHER INFORMATION

### HMIS Ratings

Health :	1*
Flammability :	1
Physical Hazard :	0

### NFPA Ratings

Health :	1
Flammability :	1
Reactivity :	0

### Further information

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.