Protectosil® ANTIGRAFFITI

 Material no.
 Version
 4.18 / US

 Specification
 116768
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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.

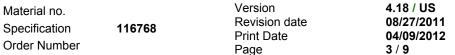
Skin contact

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.

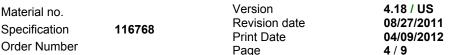
7. HANDLING AND STORAGE

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/m3

1000 ppm

Time Weighted Average (TWA) 1900 mg/m3 Permissible Exposure Limit (PEL):(US CA

OEL)

Short Term Exposure Limit 1000 ppm

(STEL):(ACGIH)

PEL:(OSHA Z1)

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 >= 480 minBreak through time

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

slightly turbid almost odorless

Odor

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/cm3 (20 °C)

Method: DIN 51757

Water solubility miscible

Viscosity, dynamic ca. 1.6 mPa.s (20 °C)

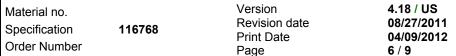
Further information

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 / AerosolMethod: 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: (CO2; modif. Sturm test / OECD 301 B)

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

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.

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)
 USA (TSCA)
 Listed/registered
 Listed/registered

Canada (DSL)

Australia (AICS)

Japan (MITI)

Korea (TCCL)

Philippines (PICCS)

Not listed/Not registered
Not listed/Not registered
Not listed/Not registered
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.