Protectosil® CHEM-TRETE® PB 100



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1. Identification

1.1. Product identifier

Trade name Protectosil® CHEM-TRETE® PB 100 Chemical Name Protectosil® CHEM-TRETE® PB 100

1.2. Recommended use of the chemical and restrictions on use

Relevant applications identified FOR PROFESSIONAL USE ONLY.

1.3. Details of the supplier of the safety data sheet

Company **Evonik Corporation**

299 Jefferson Road

Parsippany, NJ 07054-0677

USA

Telephone 973-929-8000

Telefax 973-929-8040

Email address Product-Regulatory-Services@evonik.com

1.4. 24 HOUR EMERGENCY TELEPHONE NUMBERS:

CHEMTREC - US &

CANADA:

800-424-9300

CHEMTREC MEXICO: 01-800-681-9531

CHEMTREC +1 703-527-3887 (collect calls accepted)

INTERNATIONAL:

Product Regulatory

973-929-8060

Services:

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation 29CFR 1910.1200

Flammable liquids H226 Category 3 Skin irritation Category 2 H315

2.2. Label elements

Statutory basis

Classification according to Regulation 29CFR 1910.1200

symbol(s)





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Signal word Warning

Hazard statement H226 - Flammable liquid and vapor.

H315 - Causes skin irritation.

Precautionary statement:

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking. P233 - Keep container tightly closed.

Prevention

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P264 - Wash skin thoroughly after handling.

P280 - Wear protective gloves/ eye protection/ face protection.

Precautionary statement:

Reaction

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water/shower.

P332 + P313 - If skin irritation occurs: Get medical advice/ attention.

P363 - Wash contaminated clothing before reuse.

P370 + P378 - In case of fire: Use water spray, alcohol-resistant foam, dry chemical

or carbon dioxide to extinguish.

Precautionary statement:

Storage

Precautionary statement:

Disposal

P403 + P235 - Store in a well-ventilated place. Keep cool.

P501 - Dispose of contents/ container to an approved waste disposal plant.

2.3. Other hazards

None known.

3. Composition / information on ingredients

• NJTSR No.56705700001-6651P	>= 60% - <= 100%
CAS-No. Trade Secret Flammable liquids Skin irritation	Category 4 Category 2
• NJTSR No.56705700001-5361P	>= 10% - < 30%
CAS-No. Trade Secret Skin irritation	Category 2

Other information

The specific chemical identity and exact concentration has been withheld as a trade secret.

4. First aid measures

4.1. Description of first aid measures

Inhalation

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If unconscious, evaluate the need for artificial respiration. Get immediate medical attention.

Skin contact

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Obtain medical attention. Wash clothing before reuse. Destroy or thoroughly clean contaminated shoes before reuse.

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Eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes or until all material has been removed. Obtain medical attention.

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Ingestion

If swallowed, get medical attention immediately. Only induce vomiting if directed by a physician. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms

None known

4.3. Indication of any immediate medical attention and special treatment needed

None known.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Use water spray or fog, foam, dry chemical or CO₂.

Unsuitable extinguishing media: High volume water jet.

5.2. Special hazards arising from the substance or mixture

Combustible liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint.

Burning will produce hazardous compounds including oxides of:

carbon.

5.3. Advice for firefighters

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

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Absorb spill with inert material, then place in a chemical waste container. After removal, flush contaminated area with water and collect for disposal. Clean up spills immediately. Remove sources of ignition and ventilate area. Use a respirator and other protective equipment as outlined in Section 8. Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

7. Handling and storage

7.1. Precautions for safe handling

Keep away from heat. Keep away from sparks, flames and other sources of ignition. A void contact with eyes, skin and clothing. A void breathing vapor or mist. Use with adequate ventilation. The need for grounding and bonding of containers in accordance with OSHA 29 CFR 1910.106 and NFPA 77 should be assessed for all product transfers. Follow all MSDS/label precautions even after the container is emptied because it may retain product residues. Wash thoroughly after handling.

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7.2. Conditions for safe storage, including any incompatibilities

Advice on protection against fire and explosion

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

Storage

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

Keep away from heat. Keep away from sparks, flame and other sources of ignition.

Residual vapors might explode on ignition; do not apply heat, cut, drill, grind or weld on or near this container.

8. Exposure controls/personal protection

8.1. Control parameters

Other information

Contains no substances with occupational exposure limit values.

8.2. Exposure controls

Engineering measures

Provide good ventilation or extraction.

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

Use impermeable gloves.

Eve 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

Handle in accordance with good hygiene and safety practices.

When using, do not eat, drink or smoke. Wash face and/ or hands before break and end of work. Avoid contact with skin.

If there is the possibility of skin/eye contact, the indicated hand/eye/ body protection should be used.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

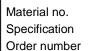
Physical state liquid Color clear Form liquid

Odor Characteristic odor.

Odor Threshold no data available

pH not determined

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no data available Melting point/range

Boiling point/range not determined

55 °C Flash point

Evaporation rate no data available

Flammability (solid, gas) No data available

Lower explosion limit not determined

Upper explosion limit not determined

Vapor pressure 74 hPa (22 °C)

Vapor density No data available

Relative vapor density no data available

Relative density no data available

Water solubility no data available

Partition coefficient: n-

Thermal decomposition

octanol/water

Autoignition temperature no data available no data available

Viscosity, dynamic no data available

no data available Viscosity, kinematic

9.2. Other information

Explosiveness Vapors can form explosive mixtures with air.

no data available

10. Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous

No dangerous reactions known.

reactions

10.4. Conditions to avoid

Keep away from heat and sources of ignition.

10.5. Incompatible materials

Water, oxidizing substances

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10.6. Hazardous decomposition products

Stable under normal conditions.

Product will not undergo hazardous polymerization.

11. Toxicological information

11.1. Information on toxicological effects

carcinogenicity assessment Contains no carcinogenic substances as defined by NTP, IARC and/or

OSHA.

Further information No investigations were carried out with the preparation itself.

Toxicological information on components NJTSR NO. 56705700001-6651P

Acute oral toxicity LD50 Rat: > 5000 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity LC50 Rat: 5.88 mg/l / 4 h / Aerosol

Method: OECD Test Guideline 403

Acute dermal toxicity LD50 Rat: > 2000 mg/kg

Method: OECD Test Guideline 402

Skin irritation Rabbit

irritating

Method: OECD Test Guideline 404

Eye irritation Rabbit

Not irritating.

Method: OECD Test Guideline 405

Sensitization Maximization test Guinea pig: Does not cause skin sensitization.

Method: OECD Test Guideline 406

Repeated dose toxicity Oral Rat / 28-day

NOAEL: > 1000 mg/kg

Method: OECD Test Guideline 407

Gentoxicity in vitro Ames test Salmonella typhimurium

negative

Method: OECD TG 471

Chromosome aberration test in vitro Chinese hamster (V 79 -cells)

negative

Method: OECD TG 473

Chromosome aberration test in vitro Chinese hamster (CHO K1 -cells)

negative

Method: OECD TG 476

Gentoxicity in vivo chromosomal aberration Mouse Oral

negative

Method: OECD TG 474

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Toxicity to reproduction Animal model trials have produced no evidence of fertility damage.

NJTSR NO. 56705700001-5361P

Acute oral toxicity LD50 Rat: > 5110 mg/kg

Method: OECD Test Guideline 401

Acute inhalation toxicity LC0 Rat: 22 ppm / 4 h / vapor

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhalation toxicity

maximum concentration in the test: no animals died.

Acute dermal toxicity LD50 Rabbit: 6730 mg/kg

Method: OECD Test Guideline 402

Skin irritation Rabbit

Skin irritation

Method: OECD Test Guideline 404

Eye irritation Rabbit

No eye irritation

Method: OECD Test Guideline 405

Sensitization maximization test Guinea pig: Does not cause skin sensitization.

Method: OECD Test Guideline 406
Test substance: Structurally similar substance

Repeated dose toxicity Oral Rat / 28-day

NOAEL: 300 mg/kg

Method: OECD TG 422

Gentoxicity in vitro Ames test Salmonella typhimurium

negative

Method: OECD TG 471

chromosomal aberration Chinese hamster (CHO K1 -cells)

negative

Method: OECD TG 473

Genetic mutation in mammal cells TK +/- mouse lymphoma cell (L5178Y)

negative

Method: OECD TG 476

Carcinogenicity No data available

Toxicity to reproduction Screening for reproductive/developmental toxicity Oral Rat

Number of exposures: daily
NOAEL (No Observed 300 mg/kg

Adverse Effect Level) of

parents:

Method: OECD TG 422

Screening for reproductive/developmental toxicity Oral Rat

Number of exposures: daily
NOAEL F1: 300 mg/kg

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Method:

OECD TG 422

12. **Ecological information**

12.1. Toxicity

no data available

12.2. Persistence and degradability

Biodegradability no data available

12.3. Bioaccumulative potential

Bioaccumulation no data available

12.4. Mobility in soil

Mobility no data available.

12.5. Other adverse effects

Further Information No ecotoxicological studies are available.

Disposal considerations 13.

13.1. Waste treatment methods

Product

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.

Uncleaned packaging

Packaging material should be recycled or disposed of in accordance with federal, state and local regulations.

14. **Transport information**

D.O.T. Road/Rail

14.1. UN number:

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (alkoxysilane)

14.3. Transport hazard class(es): 3 14.4. Packing group: Ш 14.5. Environmental hazards (Marine

pollutant):

14.6. Special precautions for user: Yes

> In the U.S. this material may be classified as combustible liquid. Combustible liquids are ROAD: (CFR)

not regulated in packages 450 liters or less. This applies for shipments by road and rail

only.

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RAIL: In the U.S. this material may be classified as combustible liquid. Combustible liquids are (CFR) not regulated in packages 450 liters or less. This applies for shipments by road and rail

only.

Air transport ICAO-TI/IATA-DGR

14.1. UN number: UN 1993

14.2. UN proper shipping name: Flammable liquid, n.o.s.(alkoxysilane)

14.3. Transport hazard class(es):
14.4. Packing group:
14.5. Environmental hazards:
14.6. Special precautions for user:
Yes

IATA-C: ERG-Code 3L

Maximum Net Quantity per Package 220 L

IATA-P: ERG-Code 3L

Maximum Net Quantity per Package 60 L

Sea transport IMDG-Code/GGVSee (Germany)

14.1. UN number: UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S. (alkoxysilane)

No

14.3. Transport hazard class(es): 3
14.4. Packing group: III
14.5. Environmental hazards (Marine pollutant): --

14.6. Special precautions for user:

EmS: F-E, S-E

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

for transport approval see regulatory information

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:

None listed

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

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Fire 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

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

An employer using HMIS/NFPA labeling must through training ensure that its employees are fully aware of the hazards of the chemicals used.

HMIS Ratings

Health: 2 Flammability: 2 Physical Hazard: 1

NFPA Ratings

Health: 2 Flammability: 2 Reactivity: 1

16. Other information

Further information

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

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Legend

ACC American Chemistry Council

ACGIH American Conference of Governmental Industrial Hygienists

ACS Advisory Committee on Sustainability

ADI Acceptable Daily Intake

ASTM American Society for Testing and Materials

ATP Adaptation to Technical Progress

BCF Bioconcentration factor
BOD Biochemical oxygen demand

c.c. closed cup

CAO Cargo Aircraft Only

Carc Carcinogen

CAS Chemical Abstract Services

CDN Canada

C EPA Canadian Environmental Protection Act

CERCLA Comprehensive Environmental Response – Compensation and Liability Act

CFR Code of Federal Regulations

CMR carcinogenic- mutagenic-toxic for reproduction

COD Chemical oxygen demand

DIN German Institute for Standardization
DM EL Derived minimum effect level
DNEL Derived no effect level
DOT Department of Transportation
EC50 half maximal effective concentration
EPA Environmental Protection Agency

ErC50 Reduction of Growth Rate

ERG Emergency Response Guide Book FDA Food and Drug Administration

GHS Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

GLP Good Laboratory Practice
GMO Genetic Modified Organism
HCS Hazard Communication Standard

HMIS Hazardous Materials Identification System
IARC International Agency for Research on Cancer
IATA International Air Transport Association

IBC Intermediate Bulk Container

ICAO-TI International Civil Aviation Organization- Technical Instructions

ICCA International Council of Chemical Association

ID Identification number

IMDG International Maritime Dangerous Goods

IUPAC International Union of Pure and Applied Chemistry
ISO International Organization for Standardization

LC50 50 % Lethal Concentration

LD50 50 % Lethal Dose **L(E)C 50** LC50 or EC50

LOA EL Lowest observed adverse effect level

LOEL Lowest observed effect level

MARPOL International Convention for the Prevention of Pollution from Ships

NFPA National Fire Protection Association
NOAEL No observed adverse effect level
NOEC no observed effect concentration

NOEL no observed effect level

o. c. open cup

OECD Organization for Economic Cooperation and Development

OEL Occupational Exposure Limit

OSHA Occupational Safety and Health Administration

PBT Persistent, bioaccumulative, toxic
PEC Predicted effect concentration
PNEC Predicted no effect concentration

RQ Reportable Quantity
SDS Safety Data Sheet

STOT Specific Target Organ Toxicity

UN United Nations

vPvB very persistent, very bioaccumulative

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VOC Volatile organic compounds

Workplace Hazardous Materials Information System World Health Organization WHMIS

WHO