

GEOGARD LV FINISH COAT WHITE 5 GL

Version 3.

Print Date 07/07/2009

REVISION DATE: 06/29/2009

SECTION 1 - PRODUCT IDENTIFICATION

Trade name : GEOGARD LV FINISH COAT WHITE 5 GL
Product code : 4980905P

COMPANY : Republic Powdered Metals
2628 Pearl Road
Medina, OH 44256

Telephone : (800) 551-7081
Emergency Phone: : 1-800-551-7081
After Hours: Chemtrec 1-800-424-9300

Product use : Coating

SECTION 2 - HAZARDS IDENTIFICATION**Emergency Overview**

White. Liquid. May cause drowsiness, weakness, and fatigue. Vapor and/or mist may irritate nose and throat. May cause moderate irritation to the respiratory system. May cause allergic respiratory sensitization. Move to fresh air. If required, artificial respiration or administration of oxygen can be performed by trained personnel. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

Acute Potential Health Effects/ Routes of Entry

Inhalation : May cause drowsiness, weakness, and fatigue. Vapor and/or mist may irritate nose and throat. May cause moderate irritation to the respiratory system. May cause allergic respiratory sensitization.

Eyes : Vapor and/or mist may cause eye irritation.

Ingestion : May cause irritation to the mouth, throat and stomach. May cause gastrointestinal irritation, nausea, and vomiting.

Skin : May cause sensitization resulting in irritation, itching and redness.

Aggravated Medical Conditions

Pre-existing eye, skin, liver, kidney, and respiratory disorders may be aggravated by exposure.

Chronic Health Effects

Overexposure may cause dermatitis, asthma, skin and respiratory sensitization and decreased lung function. Repeated overexposure to vapors and/or material may injure the liver, kidneys and respiratory system unless suitable engineering controls and/or personal protective equipment are used. Prolonged or repeated exposure to xylene may cause defatting, drying, and irritation of the skin, dermatitis, central nervous system (CNS) effects, heart muscle sensitization and arrhythmia, hearing loss, and brain, liver, kidney damage. Xylene overexposure may affect fetal development. Prolonged inhalation or ingestion of large amounts of 1-chloro-4-(trifluoromethyl)-benzene may cause liver and kidney damage based on laboratory animal studies. The International Agency for Research on Cancer (IARC) has evaluated ethylbenzene and classified it as a possible human carcinogen (Group 2B) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans. Prolonged and repeated exposure to excessive airborne concentrations of talc can result in scarring of the lungs (pneumoconiosis) or the covering of the lungs (pleural



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thickening). Fillers are encapsulated and not expected to be released from product under normal conditions of use.

Target Organs: Eye, Lung, Liver, Kidney, Skin, Nerve

SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Polyurethane Polymer	NJTSRN# 51721300-5379P	30.0 - 60.0
Titanium dioxide	13463-67-7	15.0 - 40.0
Xylene	1330-20-7	10.0 - 30.0
P-chlorobenzotrifluoride	98-56-6	10.0 - 30.0
Talc	14807-96-6	5.0 - 10.0
Ethylbenzene	100-41-4	3.0 - 7.0
Amorphous silica	7631-86-9	1.0 - 5.0
Isophorone Diisocyanate	4098-71-9	- <1.0

SECTION 4 - FIRST AID MEASURES

Get immediate medical attention for any significant overexposure.

- Inhalation : Move to fresh air. If required, artificial respiration or administration of oxygen can be performed by trained personnel. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.
- Eye contact : Flush with water for at least 15 minutes while holding eye lids apart. Get medical attention immediately.
- Skin contact : Wash area of contact thoroughly with hand cleaner followed by soap and water. If irritation, rash or other disorders develop, get medical attention immediately.
- Ingestion : Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

SECTION 5 - FIRE FIGHTING MEASURES

- Flash point : 82 °F, 28 °C
- Method : Setaflash Closed Cup
- Lower explosion limit : 1.0 %(V) Solvent
- Upper explosion limit : 7.0 %(V) Solvent
- Autoignition temperature : Not available.
- Extinguishing media : If water fog is ineffective, use carbon dioxide, dry chemical or foam.
- Hazardous combustion products : Carbon monoxide and carbon dioxide can form. Smoke, fumes. Hydrocyanic acid and nitrogen oxides can form.
- Protective equipment for firefighters : Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA).



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Fire and explosion conditions : Product may ignite if heated in excess of its flash point. Closed container, may burst when exposed to extreme heat. Empty containers may contain ignitable vapors. Vapors may travel to sources of ignition and flashback.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment. Avoid contact with material. Remove sources of ignition immediately. Stop flow of material if safe to do so. Contain spill and keep out of water courses. Ventilate area.

SECTION 7 - HANDLING AND STORAGE

Prevent inhalation of vapor, ingestion, and contact with skin eyes and clothing. Keep container closed when not in use. Precautions also apply to emptied containers. Change soiled work clothes frequently. Clean hands thoroughly after handling. Do not smoke, weld, generate sparks, or use flame near container. To prevent generation of static discharges, use bonding/grounding connection when pouring liquid. Extinguish all ignition sources including pilot lights, non-explosion proof motors and electrical equipment until vapors dissipate. Store under dry warehouse conditions away from heat and all ignition sources.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment

- Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved respirator when airborne contaminant level(s) are expected to exceed exposure limits indicated on the MSDS. Select positive pressure supplied air respirator (TC19C or equivalent) for isocyanates.
- Hand protection : Use suitable impervious nitrile or neoprene gloves and protective apparel to reduce exposure.
- Eye protection : Wear appropriate eye protection. Wear chemical safety goggles and/or face shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes with contaminated body parts or materials. Have eye washing facilities readily available.
- Skin and body protection : Prevent contact with shoes and clothing.
- Protective measures : Use professional judgment in the selection, care, and use.
- Engineering measures : Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. Use local exhaust when the general ventilation is inadequate.

Exposure Limits

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Regulation</u>	<u>Limit</u>	<u>Form</u>
Titanium dioxide	13463-67-7	ACGIH TWA:	10 mg/m3	
		OSHA PEL:	15 mg/m3	Total dust.
		OSHA TWA:	15 mg/m3	Total dust.
		OSHA TWA:	5 mg/m3	Respirable fraction.



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Chemical Name	CAS Number	Regulation	Limit	Form
Xylene	1330-20-7	ACGIH TWA: ACGIH STEL: OSHA PEL:	100 ppm 150 ppm 435 mg/m3	
Talc	14807-96-6	ACGIH TWA: OSHA TWA: OSHA TWA: OSHA PEL: OSHA PEL:	2 mg/m3 0.1 mg/m3 0.3 mg/m3 15 mg/m3 5 mg/m3	Respirable fraction. Respirable. Total dust. Total dust. Respirable fraction.
Ethylbenzene	100-41-4	ACGIH TWA: ACGIH STEL: OSHA PEL:	100 ppm 125 ppm 435 mg/m3	
Amorphous silica	7631-86-9	ACGIH TWA: ACGIH TWA: OSHA PEL: OSHA PEL: OSHA TWA:	3 mg/m3 10 mg/m3 15 mg/m3 5 mg/m3 0.8 mg/m3	Respirable particles. Inhalable particles. Total dust. Respirable fraction.
Isophorone Diisocyanate	4098-71-9	ACGIH TWA:	0.005 ppm	

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form : Liquid
 Color : White
 Odor : Solvent
 pH : Not available.
 Vapour pressure : Not available.
 Vapor density : Heavier than air
 Melting point/range : Not available.
 Freezing point : Not available.
 Boiling point/range : 250 °F, 121 °C
 Water solubility : Negligible
 Specific Gravity : 1.28
 % Volatile Weight : 27 %

SECTION 10 - REACTIVITY / STABILITY

Substances to avoid : Strong acids.Strong bases.Amines.Water or moisture.Alcohols.
 Stability : Material is stable under normal storage, handling, and use.



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Hazardous polymerization : Will not occur under normal conditions.

SECTION 11 - TOXICOLOGICAL INFORMATION

Xylene, CAS-No.: 1330-20-7	
Acute oral toxicity (LD-50 oral)	4,300 mg/kg (Rat) 1,590 mg/kg (Mouse) 6,670 mg/kg (Rat) 3,523 - 8,600 mg/kg (Rat) 5,627 mg/kg (Mouse)
Acute inhalation toxicity (LC-50)	6,350 mg/l for 4 h (Rat) 3,907 mg/l for 6 h (Mouse) 8,000 mg/l for 4 h (Rat)
Ethylbenzene, CAS-No.: 100-41-4	
Acute oral toxicity (LD-50 oral)	5,460 mg/kg (Rat) 3,500 mg/kg (Rat)
Acute dermal toxicity (LD-50 dermal)	17,800 mg/kg (Rabbit)
Amorphous silica, CAS-No.: 7631-86-9	
Acute oral toxicity (LD-50 oral)	22,500 mg/kg (Rat) 15,000 mg/kg (Mouse)
Isophorone Diisocyanate, CAS-No.: 4098-71-9	
Acute oral toxicity (LD-50 oral)	2,500 mg/kg (Mouse) 1,000 mg/kg (Rat)
Acute inhalation toxicity (LC-50)	0.033 mg/l for 4 h (Rat) 0.123 mg/l for 4 h (Rat)
Acute dermal toxicity (LD-50 dermal)	1,060 mg/kg (Rat)

SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS

RCRA Class : D001: Reportable Quantity = 100 lbs. (Characteristic of ignitability)

This classification applies only to the material as it was originally produced.

Disposal Method : Subject to hazardous waste treatment, storage, and disposal requirements under RCRA. Recycle or incinerate waste at EPA approved facility or dispose of in compliance with federal, state and local regulations.

SECTION 14 - TRANSPORTATION / SHIPPING DATA

TDG / DOT Shipping Description:

PAINT, 3, UN1263, PG III

SECTION 15 - REGULATORY INFORMATION

North American Inventories:

All components are listed or exempt from the TSCA inventory.

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This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

U.S. Federal Regulations:

SARA 313 Components : Xylene 1330-20-7
Ethylbenzene 100-41-4

SARA 311/312 Hazards : Acute Health Hazard
Fire Hazard

OSHA Hazardous Components :

Titanium dioxide 13463-67-7
Xylene 1330-20-7
Talc 14807-96-6
Ethylbenzene 100-41-4
Amorphous silica 7631-86-9
Isophorone Diisocyanate 4098-71-9

OSHA Status: Considered : Irritant
hazardous based on the
following criteria:

OSHA Flammability : IC

Regulatory VOC (less water and : 250 g/l
exempt solvent)

VOC Method 310 : 27 %

U.S. State Regulations:

MASS RTK Components : Titanium dioxide 13463-67-7
Xylene 1330-20-7
Talc 14807-96-6
Ethylbenzene 100-41-4
Amorphous silica 7631-86-9
Isophorone Diisocyanate 4098-71-9

Penn RTK Components : Polyurethane Polymer NJTSRN# 51721300-5379P
Titanium dioxide 13463-67-7
Xylene 1330-20-7
P-chlorobenzotrifluoride 98-56-6
Talc 14807-96-6
Ethylbenzene 100-41-4
Amorphous silica 7631-86-9

NJ RTK Components : Polyurethane Polymer NJTSRN# 51721300-5379P
Titanium dioxide 13463-67-7
Xylene 1330-20-7
P-chlorobenzotrifluoride 98-56-6
Talc 14807-96-6



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WARNING! Contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm:

100-41-4

Ethylbenzene

SECTION 16 - OTHER INFORMATION

HMIS Rating :

Health	2
Flammability	3
Reactivity	1
PPE	

- 0 = Minimum
- 1 = Slight
- 2 = Moderate
- 3 = Serious
- 4 = Severe

Further information:

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

Prepared by: Rich Mikol

Legend

- ACGIH - American Conference of Governmental Hygienists
- NTP - National Toxicology Program
- DOT - Department of Transportation
- DSL - Domestic Substance List
- EPA - Environmental Protection Agency
- HMIS - Hazardous Materials Information System
- IARC - International Agency for Research on Cancer
- MSHA - Mine Safety Health Administration
- NDSL - Non-Domestic Substance List
- NIOSH - National Institute for Occupational Safety and Health
- CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
- OSHA - Occupational Safety and Health Administration

- PEL - Permissible Exposure Limit
- RCRA - Resource Conservation and Recovery Act
- RTK - Right To Know
- SARA - Superfund Amendments and Reauthorization Act
- STEL - Short Term Exposure Limit
- TLV - Threshold Limit Value
- TSCA - Toxic Substances Control Act
- TWA - Time Weighted Average
- V - Volume
- VOC - Volatile Organic Compound
- WHMIS - Workplace Hazardous Materials Information System

