

# Material Safety Data Sheet

RG-2400 LT®

## 1. Product and company identification

<b>Product name</b>	: RG-2400 LT®
<b>Synonym</b>	: Not available.
<b>Trade name</b>	: Not available.
<b>Material uses</b>	: Coating for the prevention of corrosion.
<b>Code</b>	: Not available.
<b>Supplier/Manufacturer</b>	: Polyguard Products Inc. 3801 South Interstate 45 Ennis, TX 75119 Tel: (800)541-4994
<b>MSDS authored by</b>	: KMK Regulatory Services Inc.
<b>In case of emergency</b>	: CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3887

## 2. Hazards identification

### Emergency overview

<b>Physical state</b>	: Liquid. [Creamy gel.]
<b>Color</b>	: Bluish.
<b>Odor</b>	: Not available.
<b>Hazard statements</b>	: NOT EXPECTED TO PRODUCE SIGNIFICANT ADVERSE HEALTH EFFECTS WHEN THE RECOMMENDED INSTRUCTIONS FOR USE ARE FOLLOWED.

**Titanium oxide is not in its respirable form and is a constituent of the mixture.**

**Routes of entry** : Dermal contact. Eye contact. Ingestion.

### Potential acute health effects

<b>Inhalation</b>	: No known significant effects or critical hazards.
<b>Ingestion</b>	: No known significant effects or critical hazards.
<b>Skin</b>	: No known significant effects or critical hazards.
<b>Eyes</b>	: No known significant effects or critical hazards.

### Potential chronic health effects

<b>Chronic effects</b>	: No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: No known significant effects or critical hazards.
<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.
<b>Target organs</b>	: No known significant effects or critical hazards.

### Over-exposure signs/symptoms

<b>Inhalation</b>	: No known significant effects or critical hazards.
<b>Ingestion</b>	: No known significant effects or critical hazards.
<b>Skin</b>	: No known significant effects or critical hazards.
<b>Eyes</b>	: No known significant effects or critical hazards.

## 2. Hazards identification

**Medical conditions aggravated by overexposure** : None known.

See toxicological information (Section 11)

## 3. Composition/information on ingredients

Name	CAS number	%
Silicic acid, calcium salt	1344-95-2	5 - 10
Titanium dioxide	13463-67-7	0.1 - 1

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

## 4. First aid measures

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms occur.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

## 5. Fire-fighting measures

- Flammability of the product** : May be combustible at high temperature.
- Extinguishing media**
- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : No specific fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
metal oxide/oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Special remarks on fire hazards** : Not available.
- Special remarks on explosion hazards** : Not available.

## 6. Accidental release measures

- Personal precautions** : Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods for cleaning up

- Spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## 7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## 8. Exposure controls/personal protection

<b>Occupational exposure limits</b>		<b>TWA (8 hours)</b>			<b>STEL (15 mins)</b>			<b>Ceiling</b>			
<b>Ingredient</b>	<b>List name</b>	<b>ppm</b>	<b>mg/ m<sup>3</sup></b>	<b>Other</b>	<b>ppm</b>	<b>mg/ m<sup>3</sup></b>	<b>Other</b>	<b>ppm</b>	<b>mg/ m<sup>3</sup></b>	<b>Other</b>	<b>Notations</b>
Titanium dioxide	US ACGIH 4/2014	-	10	-	-	-	-	-	-	-	[3]
	AB 4/2009	-	10	-	-	-	-	-	-	-	[a]
	BC 7/2013	-	3	-	-	-	-	-	-	-	[b]
Silicic acid, calcium salt	ON 1/2013	-	10	-	-	-	-	-	-	-	[b]
	QC 1/2014	-	10	-	-	-	-	-	-	-	[b]
	US ACGIH 4/2014	-	10	-	-	-	-	-	-	-	[3] [c]
	AB 4/2009	-	10	-	-	-	-	-	-	-	[a]
	BC 7/2013	-	3	-	-	-	-	-	-	-	[b]
	ON 1/2013	-	10	-	-	-	-	-	-	-	[b]
	QC 1/2014	-	10	-	-	-	-	-	-	-	[b]

[3]Skin sensitization

Form: [a]Respirable dust [b]Total dust [c]Nonfibrous

Consult local authorities for acceptable exposure limits.

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

- Engineering measures** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

## 8. Exposure controls/personal protection

<b>Hygiene measures</b>	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
<b>Personal protection</b>	
<b>Respiratory</b>	: Under normal conditions, respiratory protection is not required.
<b>Hands</b>	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
<b>Eyes</b>	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
<b>Skin</b>	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
<b>Environmental exposure controls</b>	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

## 9. Physical and chemical properties

<b>Physical state</b>	: Liquid. [Creamy gel.]
<b>Flash point</b>	: Open cup: 179.44°C (355°F) [Cleveland.]
<b>Burning time</b>	: Not applicable.
<b>Burning rate</b>	: Not applicable.
<b>Auto-ignition temperature</b>	: 434 to 437°C (813.2 to 818.6°F)
<b>Flammable limits</b>	: Not available.
<b>Color</b>	: Bluish.
<b>Odor</b>	: Not available.
<b>Taste</b>	: Not available.
<b>Molecular weight</b>	: Not applicable.
<b>Molecular formula</b>	: Not applicable.
<b>pH</b>	: Not available.
<b>Boiling/condensation point</b>	: Not available.
<b>Melting/freezing point</b>	: Not available.
<b>Critical temperature</b>	: Not available.
<b>Relative density</b>	: 0.95 to 1.15
<b>Vapor pressure</b>	: Not available.
<b>Vapor density</b>	: Not available.
<b>Volatility</b>	: Not available.
<b>Odor threshold</b>	: Not available.
<b>Evaporation rate</b>	: Not available.
<b>SADT</b>	: Not available.
<b>Viscosity</b>	: Not available.
<b>Ionicity (in water)</b>	: Not available.
<b>Dispersibility properties</b>	: Not available.
<b>Solubility</b>	: Insoluble in water.

## 9. Physical and chemical properties

**VOC = Volatile Organic Compound** : 0 g/L

**Physical/chemical properties comments** : Not available.

## 10. Stability and reactivity

**Chemical stability** : The product is stable.

**Conditions to avoid** : No specific data.

**Incompatible materials** : No specific data.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

## 11. Toxicological information

### Acute toxicity

There is no data available.

### Chronic toxicity

There is no data available.

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Titanium dioxide	Skin - Mild irritant	Human	-	72 hours 300 µg Intermittent	-

### Sensitizer

There is no data available.

### Carcinogenicity

#### Classification

Product/ingredient name	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Silicic acid, calcium salt	-	-	-	A4	-	None.
Titanium dioxide	-	2B	-	A4	-	+

### Mutagenicity

There is no data available.

### Teratogenicity

There is no data available.

### Reproductive toxicity

There is no data available.

**Synergistic products** : Not available.

## 12. Ecological information

**Ecotoxicity** : No known significant effects or critical hazards.

### Aquatic ecotoxicity

## 12. Ecological information

Product/ingredient name	Result	Species	Exposure
Titanium dioxide	Acute EC50 5.83 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute LC50 3 mg/L Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 5.5 ppm Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 1000 mg/L Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 0.984 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours

### Persistence/degradability

There is no data available.

<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Bioconcentration factor</b>	: Not available.
<b>Mobility</b>	: Not available.
<b>Toxicity of the products of biodegradation</b>	: Not available.
<b>Other adverse effects</b>	: No known significant effects or critical hazards.

## 13. Disposal considerations

**Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**Waste stream** : Not available.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>TDG Classification</b>	Not regulated.	-	-	-		-
<b>IMDG Class</b>	Not regulated.	-	-	-		-
<b>IATA-DGR Class</b>	Not regulated.	-	-	-		-

PG\* : Packing group

Exemption to the above classification may apply.

**AERG** : Not applicable



## 15. Regulatory information

**WHMIS (Canada)** : Not controlled under WHMIS (Canada).

### Canadian lists

**Canadian NPRI** : None of the components are listed.

**CEPA Toxic substances** : None of the components are listed.

**Canada inventory** : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

### International regulations

**International lists** :

- Australia inventory (AICS)**: All components are listed or exempted.
- China inventory (IECSC)**: All components are listed or exempted.
- Japan inventory**: Not determined.
- Korea inventory**: All components are listed or exempted.
- Malaysia Inventory (EHS Register)**: Not determined.
- New Zealand Inventory of Chemicals (NZIoC)**: All components are listed or exempted.
- Philippines inventory (PICCS)**: All components are listed or exempted.
- Taiwan inventory (CSNN)**: Not determined.

**Chemical Weapons** : Not listed

**Convention List Schedule I Chemicals**

**Chemical Weapons** : Not listed

**Convention List Schedule II Chemicals**

**Chemical Weapons** : Not listed

**Convention List Schedule III Chemicals**

## 16. Other information

### History

**Date of issue** : 11/15/2014

**Date of previous issue** : 01/15/2012

**Version** : 5

**Revised Section(s)** : 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.