# Material Safety Data Sheet

**Issuing Date** 29-Apr-2011 **Revision Date** 20-Aug-2012 **Revision Number** 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** **Y1G-5GX-FL THERMOPLASTIC**

**Product Code(s)** **884112**

**Recommended Use** Traffic paint

**Product Technology** Thermo

**Supplier Address**
Ennis-Flint
5910 North Central Expressway
Suite 1050
Dallas TX 75206
T: 800.331.8118
800.331.8118 (For Technical Inquiries)

**Chemical Emergency Phone Number** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

**DANGER!**

### Emergency Overview

Product dust may be irritating to eyes, skin and respiratory system
May cause respiratory impairment and lung damage
May cause sensitization by skin contact
Cancer hazard
WARNING! This product contains a chemical known in the State of California to cause cancer.

**Appearance** Yellow **Physical State** Solid. **Odor** Odorless

**Potential Health Effects**

**Acute Toxicity**

**Eyes** May cause irritation. The molten product can cause serious burns.

**Skin** May cause irritation. May cause sensitization by skin contact. The molten product can cause serious burns.

**Inhalation** Inhalation of dust in high concentration may cause irritation of respiratory system. Excessive inhalation of vapors in molten state can cause nose and throat irritation, may cause nervous system depression characterized by headache, dizziness, nausea, staggering gait, confusion and unconsciousness. In molten state, the material does not give off fumes that are toxic or injurious to persons or property.

**Ingestion** Ingestion may cause irritation to mucous membranes.

**Chronic Effects** Repeated contact may cause allergic reactions in very susceptible persons. Inhalation overexposure to free crystalline silica may cause delayed lung injury including silicosis, a disabling and potentially fatal lung disease. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1). Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation.

**Aggravated Medical Conditions** Respiratory disorders. Lungs.

**Environmental Hazard** Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. See Section 12 for additional Ecological Information.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | Weight % |
|---|---|---|
| Limestone | 1317-65-3 | 30-60 |
| Glass, oxide | 65997-17-3 | 30-60 |
| Modified Rosin Ester | Proprietary | 10-30 |
| Paraffin | 8002-74-2 | 10-30 |
| Maleic Modified Rosin Ester | Proprietary | 7-13 |
| Quartz | 14808-60-7 | 3-7 |
| Calcium carbonate | 471-34-1 | 3-7 |
| Titanium dioxide | 13463-67-7 | 1-5 |

## 4. FIRST AID MEASURES

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Contact with molten materials, requires immediate medical assistance.

**Skin Contact** Wash off with warm water and soap. Remove and wash contaminated clothing before re-use. In the case of skin irritation or allergic reactions see a physician. In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. Removal of solidified molten material from skin requires medical assistance. If burned by contact with molten material, remove patient from heat source. Remove smoldering clothing, including shoes, boots and jewelry. Cool the burn with water or saline until the skin returns to normal temperature. Cover patient with dry clean sheet. Do not attempt to remove the molten thermoplastic from the skin. Removal could result in severe tissue damage. Do not use ice. Conduct primary survey. If indicated transport patient to emergency treatment facility.

**Inhalation** Move to fresh air. If symptoms persist, call a physician.

**Ingestion** Clean mouth with water and afterwards drink plenty of water. Consult a physician.

**Notes to Physician** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Flammable Properties** Not flammable.

**Flash Point** > 500 °F

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None

**Protective Equipment and Precautions for Firefighters** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

| | | | | |
|---|---|---|---|---|
| **NFPA** | **Health Hazard** 1 | **Flammability** 1 | **Instability** 0 | **Physical and Chemical Hazards** - |
| **HMIS** | **Health Hazard** 1* | **Flammability** 1 | **Physical Hazard** 0 | **Personal Protection** X |

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions** Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation.

**Environmental Precautions** Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Use personal protective equipment. Avoid dust formation. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically and collect in suitable container for disposal.

## 7. HANDLING AND STORAGE

**Handling** Ensure adequate ventilation. Avoid breathing dust. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Fine dust dispersed in air may ignite. Do not reheat product packaged in light metal containers. The light metal containers will not safely support the movement or transfer of the product in a hot, molten form.

Do not heat over 500°F in a closed container. This product when heated to above 500°F can lead to flashing. Appropriate protective equipment must be worn when mixing and applying this product.

The thermoplastic bag can be hazardous when empty, because it can retain product residue. Therefore do not reuse container for food, clothing, or products for human or animal consumption or where skin contact may occur. Always obey hazard warnings and handle containers as if they were full.

The meltable bag is compatible with the thermoplastic allowing them to melt and become part of the hot melt mixture at application temperature.

**Storage** Keep container tightly closed. Keep in properly labeled containers. Keep out of the reach of children.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Guidelines**

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|
| Limestone<br>1317-65-3 | - | TWA: 15 mg/m³ total dust<br>TWA: 5 mg/m³ respirable fraction<br>(vacated) TWA: 15 mg/m³ total dust<br>(vacated) TWA: 5 mg/m³ respirable fraction | TWA: 10 mg/m³ total dust<br>TWA: 5 mg/m³ respirable dust |
| Glass, oxide<br>65997-17-3 | TWA: 1 fiber/cm3 respirable fibers: length >5 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination<br>TWA: 5 mg/m³ inhalable fraction | - | |
| Paraffin<br>8002-74-2 | TWA: 2 mg/m³ | (vacated) TWA: 2 mg/m³ | TWA: 2 mg/m³ |
| Quartz<br>14808-60-7 | TWA: 0.025 mg/m³ respirable fraction | 30/(%SiO2+2) mg/m³ TWA, Total Dust;250/%SiO2+5) mppcf TWA, respirable fraction; 10/(%SiO2+2) mg/m³ TWA, respirable<br>TWA: 0.1 mg/m³ (vacated) | IDLH: 50 mg/m³ respirable dust<br>TWA: 0.05 mg/m³ respirable dust |
| Calcium carbonate<br>471-34-1 | - | TWA: 15 mg/m³<br>TWA: 5 mg/m³<br>(vacated) TWA: 15 mg/m³<br>(vacated) TWA: 5 mg/m³ | TWA: 10 mg/m³ total dust<br>TWA: 5 mg/m³ respirable dust |
| Titanium dioxide<br>13463-67-7 | TWA: 10 mg/m³ | TWA: 15 mg/m³ total dust<br>(vacated) TWA: 10 mg/m³ total dust | IDLH: 5000 mg/m³ |

*ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.*

**Engineering Measures**

Showers
Eyewash stations
Ventilation systems

**Personal Protective Equipment**

**Eye/Face Protection** No special protective equipment required.

**Skin and Body Protection** Wear protective gloves/clothing.

**Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|---|---|---|---|
| **Appearance** | Yellow. | **Odor** | Odorless. |
| **Odor Threshold** | Not applicable | **Physical State** | Solid |
| **pH** | Not applicable | | |
| **Flash Point** | > 500 °F | **Autoignition Temperature** | Not applicable |
| **Decomposition Temperature** | Not applicable | **Boiling Point/Boiling Range** | Not applicable |
| **Melting Point/Range** | 95 -120 °C / 203 - 248 °F | | |
| | | **Flammability Limits in Air** | Not applicable |
| **Specific Gravity** | 1.7 - 2.3 | **Water Solubility** | Insoluble in water. |
| **Solubility** | Not applicable | **Evaporation Rate** | Not applicable |
| **Vapor Pressure** | Not applicable | **Vapor Density** | Not applicable |
| **VOC (g/l)** | 0 | | |

## 10. STABILITY AND REACTIVITY

**Stability** Stable under recommended storage conditions.

**Incompatible Products** None known based on information supplied.

**Conditions to Avoid** Dust formation.

**Hazardous Decomposition Products** Carbon oxides. Nitrogen oxides (NOx). Maleic acid.

**Hazardous Polymerization** Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity**

**Product Information** No acute toxicity information is available for this product.

**Component Information**

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Paraffin | > 3750 mg/kg ( Rat ) | > 3600 mg/kg ( Rabbit ) | - |
| Calcium carbonate | = 6450 mg/kg ( Rat ) | | |
| Titanium dioxide | > 10000 mg/kg ( Rat ) | | > 6820 mg/m$^3$ |
| Quartz | 500 mg/kg ( Rat ) | | |

**Chronic Toxicity**

**Chronic Toxicity** Repeated contact may cause allergic reactions in very susceptible persons. Inhalation overexposure to free crystalline silica may cause delayed lung injury including silicosis, a disabling and potentially fatal lung disease. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1). Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---|---|---|---|---|
| Glass, oxide | | Group 3 | | |
| Quartz | A2 | Group 1 | Known | X |
| Titanium dioxide | | Group 2B | | X |

**Target Organ Effects** Respiratory system.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**
The environmental impact of this product has not been fully investigated.

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated Packaging** Do not re-use empty containers.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated (Product as shipped)
**Proper shipping name** Elevated temperature liquid, n.o.s. (Product in use)

**Description** ELEVATED TEMPERATURE MATERIAL, LIQUID, N.O.S.(COMPOUND PAVEMENT MARKING), 9, UN 3257, III. (Product in use)

**TDG** Not regulated

**MEX** Not regulated

**ICAO** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

## 15. REGULATORY INFORMATION

**International Inventories**

| | |
|---|---|
| **TSCA** | All components are listed on the TSCA Inventory. |
| **DSL** | All components are listed either on the DSL or NDSL. |

**Legend**
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**U.S. Federal Regulations**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

**SARA 311/312 Hazard Categories**

| | |
|---|---|
| **Acute Health Hazard** | No |

| | |
|---|---|
| **Chronic Health Hazard** | Yes |
| **Fire Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |
| **Reactive Hazard** | No |

**Clean Water Act**
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CERCLA**
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

## U.S. State Regulations

**California Proposition 65**
This product contains the following Proposition 65 chemicals:

| Chemical Name | CAS-No | California Prop. 65 |
|---|---|---|
| Titanium dioxide | 13463-67-7 | Carcinogen |
| Quartz | 14808-60-7 | Carcinogen |

## U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Limestone | X | X | X | | X |
| Paraffin | X | X | X | - | X |
| Titanium dioxide | X | X | X | - | X |
| Quartz | X | X | X | - | X |

## International Regulations

| Chemical Name | Carcinogen Status | Exposure Limits |
|---|---|---|
| Limestone | | Mexico: TWA 10 mg/m$^3$<br>Mexico: STEL 20 mg/m$^3$ |
| Paraffin | | Mexico: TWA= 2 mg/m$^3$<br>Mexico: STEL= 6 mg/m$^3$ |
| Titanium dioxide | | Mexico: TWA= 10 mg/m$^3$<br>Mexico: STEL= 20 mg/m$^3$ |
| Quartz | | Mexico: TWA= 0.1 mg/m$^3$ |

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

**WHMIS Hazard Class**
D2A Very toxic materials
D2B Toxic materials

## 16. OTHER INFORMATION

| | |
|---|---|
| **Prepared By** | Product Stewardship<br>23 British American Blvd.<br>Latham, NY 12110<br>1-800-572-6501 |
| **Issuing Date** | 29-Apr-2011 |
| **Revision Date** | 20-Aug-2012 |
| **Revision Note** | (M)SDS sections updated: 1, 2, 4, 7, 9 |

**General Disclaimer**

**The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication and it does not purport to be all inclusive and shall be used only as a guide. We urge each customer or recipient of this MSDS to study it carefully to become aware of and understand the potential hazards associated with the product. The information given is designed only as a guide 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 material or in any process, unless specified in the text. Any use of the product not in conformance with this MSDS or in combination with any other product or process is the responsibility of the user. Customary precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Remove all soiled and contaminated clothing immediately.**

**End of Safety Data Sheet**