35 Fraser Court, Unit 2
Barrie, ON L4N 5J5
1-888-919-8842

# SAFETY DATASHEET

## SECTION 1. IDENTIFICATION

**Product identifier used on the label**: **GENTEM PREFORM THERMOPLASTIC**

**Other means of identification**: Preformed Thermoplastic Road Marking Material
Product Code: GT2001, GT2002

**Product use** : Use in road and construction products.
**Area of application** : For industrial/professional use only.
**Product Type** : Solid

**Name, address, and telephone number of the supplier:**
Gentem Inc.
35 Fraser Court, Unit 2
Barrie, Ontario L4N 5J5

**Name, address, and telephone number of the manufacturer:**
See supplier

**Supplier's Tel #** : 888-919-8842
**Supplier's Email** : info@gentem.ca
**24 Hr. Emergency Tel #** : **CHEMTREC**: 1-800-424-9300 or +1-703-527-3887 (24/7)

## SECTION 2. HAZARDS IDENTIFICATION

**Classification of the chemical**
Not classified.

**Label elements**

*Signal word* : No signal word.
*Hazard statements* : No known significant effects or critical hazards.

*Precautionary statements*
Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.
Supplemental label elements : Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 10%
: Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 10%
: Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 100%

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture : Mixture
Other means of identification : Not available.

| Chemical name | CAS # | Concentration (%wt) |
|---|---|---|
| Calcium Carbonate | 471-34-1 | 60-80 |
| Titanium Dioxide | 13463-67-7 | 2-10 |

(1) The actual concentration or actual concentration range is withheld as a trade secret.

**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.**
**Occupational exposure limits, if available, are listed in Section 8.**

## SECTION 4. FIRST-AID MEASURES



SDS Preparation Date (mm/dd/yyyy): 19/11/2019

**Description of first aid measures**

Ingestion : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin Contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Eye Contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Most Important Symptoms and Effects (both acute and delayed)
: No known significant effects or critical hazards.

Indication of any immediate medical attention and special treatment needed
: Treat symptomatically.

## SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing media**

**Suitable extinguishing media:** In case of fire, use water spray (fog), foam or dry chemical.

**Unsuitable extinguishing media:** Do not use water jet.

**Specific hazards arising from the chemical:** No specific fire or explosion hazard.

**Hazardous thermal decomposition products:** Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

**Special protective actions for fire-fighters**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**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.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**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 and material for containment and cleaning up**

Small Spill : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large Spill : Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**Special spill response procedures**

: Not available.

## SECTION 7. HANDLING AND STORAGE

**Precautions for safe handling**

: 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. See also Section 8 for additional information on hygiene measures.**Conditions for safe storage**

: Improper disposal or re-use of this container may be dangerous and illegal. Keep away from direct sunlight. Keep containers closed when not in use. Ensure there is good room ventilation. Limit storage of flammable liquids to approved areas equipped with overhead sprinklers. Protect material from contamination (refer to Section 10 for incompatibilities).
Residual vapors might explode on ignition; do not apply heat, cut, drill, grind or weld on or near this container. Do not heat or cut the empty container with electric or gas torch. Keep in the original container at a temperature not exceeding 30 °C (86 °F). Keep away from heat. Keep away from sparks, flames and other sources of ignition. Fill the container by approximately 90 % only as oxygen (air) is required for stabilization. With
large storage containers make sure the oxygen (air) supply is sufficient to ensure stability.

**Incompatible materials**

: Store between the following temperatures: 5 to 25°C (41 to 77°F). 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. See Section 10 for incompatible materials before handling or use.

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Ingredient name | Exposure limits |
|---|---|
| calcium carbonate | CA Quebec Provincial (Canada, 1/2014). TWAEV: 10 mg/m³ 8 hours. Form: Total dust. CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 10 mg/m³ 8 hours. |

| | |
|---|---|
| titanium dioxide | CA British Columbia Provincial (Canada, 5/2019).<br>TWA: 3 mg/m³ 8 hours. Form: Respirable dust<br>TWA: 10 mg/m³ 8 hours. Form: Total dust CA Quebec Provincial (Canada, 1/2014). TWAEV: 10 mg/m³ 8 hours. Form: Total dust.<br>CA Alberta Provincial (Canada, 6/2018).<br>8 hrs OEL: 10 mg/m³ 8 hours.<br>CA Ontario Provincial (Canada, 1/2018).<br>TWA: 10 mg/m³ 8 hours.<br>CA Saskatchewan Provincial (Canada, 7/2013).<br>STEL: 20 mg/m³ 15 minutes.<br>TWA: 10 mg/m³ 8 hours. |

**Exposure controls**

**Ventilation and engineering measures**
: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

**Skin protection** : 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.
: 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.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Eye / face protection** : 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, gases 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.

**Other protective equipment**
: Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

**General hygiene considerations**
: Take off all contaminated clothing immediately. Store work clothing separately. Follow the usual good standards of occupational hygiene. Clean skin thoroughly after work; apply skin cream.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** : Solid
**Color** : White
**Odour** : Odourless
**Odour threshold** : Not available.
**pH** : Not available.
**Melting point/freezing point** : 90 to 120°C (194 to 248°F)
**Initial boiling point and boiling range** : Not available.
**Flash point** : Closed cup: >230°C (>446°F)
**Flash point (method)** : Not available
**Evaporation rate** : Not available
**Flammability (solid, gas)** : Not available
**Lower flammability limit (% by volume)** : Not available
**Upper flammability limit (% by volume)** : Not available

**Oxidizing properties** : Not available
**Explosive properties** : Not explosive as defined by EU hazardous substance law.
**Vapour pressure** : Not available
**Vapour density** : Not available
**Relative density / Specific gravity** : 1.9 to 2.1 g/cm³
**Solubility in water** : Insoluble in the following materials: cold water and hot water.
**Other solubility(ies)** : None known
**Partition coefficient:** : Not available.
: Not applicable
**Auto-ignition temperature** : not pyrophoric
**Decomposition temperature** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
**Volatiles (% by weight)** : Not available
**Volatile organic** : Not available **compounds (VOCs)**
**Absolute pressure of container** : Not applicable
**Flame projection length** : Not applicable
**Other physical/ chemical comments** : Minimum ignition temperature: 430 °C (methyl methacrylate)

## SECTION 10. STABILITY AND REACTIVITY

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
**Chemical stability** : The product is stable.
**Possibility of hazardous reactions** : Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions. Vigorous polymerization is possible when heated /exposed to heat..
**Conditions to avoid** : Keep away from water or moist air.
**Incompatible materials** : No specific data.
**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| calcium carbonate | LD50 Dermal | Rat - Male | >2000 mg/kg | - |
| | LD50 Oral | Female Rat | 6450 mg/kg | - |

**Conclusion/Summary** : Not available.
Irritation/Corrosion

| Product/ingredient name | Result | Species | Exposure | Observation |
|---|---|---|---|---|
| calcium carbonate | Eyes - Severe irritant | Rabbit | 24 hours 750 ug | - |
| | Skin - Moderate irritant | Rabbit | 24 hours 500 mg | - |

**Conclusion/Summary**
Skin : Not available.
Eyes : Not available.
Respiratory : Not available.
**Sensitization**
**Conclusion/Summary**
Skin : Not available.
Respiratory : Not available.
**Mutagenicity**
Conclusion/Summary : Not available.
**Carcinogenicity**

Conclusion/Summary : Not available.

**Reproductive toxicity**

Conclusion/Summary : Not available.

**Teratogenicity**

Conclusion/Summary : Not available.

**Specific target organ toxicity (single exposure)**

: Not available.

**Specific target organ toxicity (repeated exposure)**

: Not available.

**Aspiration hazard** :Not available.

**Information on the likely routes of exposure:** Not available.

**Potential acute health effects**

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : No specific data.
Ingestion : No specific data.

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

Potential immediate effects : Not available.
Potential delayed effects : Not available.

**Long term exposure**

Potential immediate effects : Not available.
Potential delayed effects : Not available.

**Potential chronic health effects**

Conclusion/Summary : Not available.
General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

**Numerical measures of toxicity**

Acute toxicity estimates

| Product/ingredient name | Oral (mg/ kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|---|---|---|---|---|
| Preformed thermoplastic | 13750 | 2750 | N/A | N/A | N/A |
| calcium carbonate | 6450 | 2500 | N/A | N/A | N/A |

## SECTION 12. ECOLOGICAL INFORMATION

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|

| | | | |
|---|---|---|---|
| calcium carbonate | Acute EC50 >100 mg/l Fresh water | Daphnia | 48 hours |
| | Acute LC50 >56000 ppm Fresh water | Fish - Gambusia affinis - Adult | 96 hours |
| | Chronic NOEC 61 mg/g Fresh water | Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) | 28 days<br>48 hours |
| titanium dioxide | Acute LC50 3 mg/l Fresh water | Crustaceans - Ceriodaphnia | |
| | Acute LC50 6.5 mg/l Fresh water | dubia - Neonate | 48 hours |
| | Acute LC50 >1000000 µg/l Marine water | Daphnia - Daphnia pulex - Neonate | 96 hours |
| | | Fish - Fundulus heteroclitus | |

**Conclusion/Summary** : Not available.

**Persistence and degradability**
**Conclusion/Summary** : Not available.

**Bioaccumulative potential**
Not available.

**Mobility in soil**
**Soil/water partition coefficient (KOC)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## SECTION 13. DISPOSAL CONSIDERATIONS

**Methods of Disposal** **:** The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times 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.

## SECTION 14. TRANSPORT INFORMATION

| | TDG Classification | DOT Classification | ADR/RID | IMDG | IATA |
|---|---|---|---|---|---|
| **UN number** | Not regulated. | Not regulated. | Not regulated. | Not regulated. | Not regulated. |
| **UN proper shipping name** | - | - | - | - | - |
| **Transport hazard class(es)** | - | - | - | - | - |
| **Packing group** | - | - | - | - | - |
| **Environmental hazards** | No. | No. | No. | No. | No. |

**Special precautions for user**

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL and the IBC Code:**
Not available.

## SECTION 15. REGULATORY INFORMATION

**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.

**International regulations**
**Chemical Weapon Convention List Schedules I, II & III Chemicals**
Not listed.
**Montreal Protocol**
Not listed.
**Stockholm Convention on Persistent Organic Pollutants**
Not listed.
**Rotterdam Convention on Prior Informed Consent (PIC)**
Not listed.
**UNECE Aarhus Protocol on POPs and Heavy Metals**
Not listed.

## SECTION 16. OTHER INFORMATION

**Key to abbreviations :**

**ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor**
**GHS = Globally Harmonized System of Classification and Labelling of Chemicals**
**HPR = Hazardous Products Regulations**
**IATA = International Air Transport Association**
**IBC = Intermediate Bulk Container**
**IMDG = International Maritime Dangerous Goods**
**LogPow = logarithm of the octanol/water partition coefficient**
**MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)**
**N/A = Not available**
**UN = United Nations**

**Preparation Date (mm/dd/yyyy)**
: 19/11/2019
**Other special considerations for handling**
: Provide adequate information, instruction and training for operators.
**Prepared by**
: Gentem Inc.
35 Fraser Court, Unit 2
Barrie, ON L4N 5J5

**DISCLAIMER**

This Safety Data Sheet was prepared by Gentem Inc. The information in the Safety Data Sheet is offered for your consideration and guidance when exposed to this product. Gentem Inc. expressly disclaims all expressed or implied warranties and assumes no responsibilities for the accuracy or completeness of the data contained herein. The data in this Safety Data Sheet does not apply to use with any other product or in any other process.