

SAFETY DATASHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label: **GENTEM ENDURANCE ALKYD 20**

Other means of identification: Granular Thermoplastic Road Marking Material
Product Code: GT1002, GT1004

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

Hazard Pictogram(s):



Signal word : Warning

Hazard statements :

Cold Form (As Received)	Heated Material (During Application)
H318 Causes serious eye damage	H314 Causes severe skin burns and eye damage
H335 May cause respiratory irritation	
H315 Causes skin irritation	
H341 Suspected of causing genetic defects	
H350 May cause cancer	

Precautionary statements

Response

: P304: IF INHALED: Remove person to fresh air and keep at rest in a comfortable position for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

: P305: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

: P337 + P313 IF EYE IRRITATION PERSISTS: Get medical advice/attention

: P308 + P313: IF EXPOSED or CONCERNED: Get medical advice/attention. Get medical advice or attention if you feel unwell.

Storage

: P403 + P233: Store in a well-ventilated place. Keep container tightly closed

Disposal : P501: Dispose of contents/ container to an approved waste disposal plant

Supplemental label elements : Molten and heated products contain a thermal hazard. Heated material can cause thermal burns. Fumes from heated material may be irritating to the eye, nose and throat.

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	30-60
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

Description of first aid measures

Ingestion : If swallowed, do not induce vomiting. Drink a large volume of water and get immediate medical attention. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head lower than hips to prevent aspiration.

Inhalation : Remove person to fresh air. If lung irritation persists or later develops, contact a physician. If not breathing, initiate rescue breathing, give oxygen by trained personnel and get immediate medical attention. Do not attempt to rescue victim from confined spaces without adequate protective equipment.

Skin Contact : If dust or molten product contacts the skin, quickly remove contaminated clothing and cool immediately by immersing the contacted skin in cool water to limit tissue damage and skin damage. For extensive burns cover with sterile bandage. Molten product may adhere strongly to skin and attempted removal may cause severe distress and further tissue damage. Do not use solvents to remove product from the skin. For product dust that is not hot, wash off with soap and water. Get medical attention if irritation develops and persists

Eye Contact : If dust or molten or heated product splashes into eyes or hardened dust gets into the eyes, immediately flush with plenty of water for at least 15 minutes. Hold eyelids apart. Remove contacts is present and easy to do. Occasionally lift the eyelid(s) to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from the eye(s). Get medical attention if irritation, pain swelling or any other eye issue develops or persists.

Most Important Symptoms and Effects (both acute and delayed)

: Emissions from the heated material may have an unpleasant odor and may cause moderate to severe irritation of the mucous membranes and upper respiratory tract, headaches, nausea and dizziness.

: Do not depend upon sense of smell for warning of overexposure since unconsciousness and asphyxiation may occur in poorly ventilated or confined spaces. See Section 11 for additional information.

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

Special protective actions for fire-fighters: Keep dust to a minimum to avoid potential formation of explosive air/dust mixture. Will not explode on mechanical impact. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

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

- : If hot product is spilled, evacuate unnecessary personnel, remove all heat and ignition sources, and provide explosion proof ventilation. Use water spray to reduce vapors. Wear appropriate protective equipment and clothing during clean-up of materials that contain or may liberate dust
- : Hot material during installation will cause thermal burns to skin and eyes if exposed. Wear a Canadian Standards Association-certified face shield, CSA-certified safety glasses, appropriate gloves and heat-resistant protective clothing when working with hot thermoplastic paint.

Environmental precautions

- : Avoid discharge of fine particulate matter into drains or water courses. Do not dry sweep broken, dusty material. Use water spray to minimize dust or vacuum with HEPA filters.

Methods and material for containment and cleaning up

- : Avoid dust generation. Vacuum dust with equipment fitted with a HEPA filter
- : Allow hot molten material to cool and then dispose of in accordance with local Regulations.
- : All persons dealing with clean-up should wear the appropriate protective equipment.

Special spill response procedures

- : Not available.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

- : Avoid contact with molten material
- : Handle in accordance with good industrial hygiene and safety practices.
- : Avoid formation of dust. Wear appropriate protective equipment when working with this product.
- : Wash hands after use.
- : Do NOT eat, drink, or smoke in work areas.
- : Do not heat over 260°C/500°F in a closed container. This product when heated to above 260°C/500°F can lead to flashing. Appropriate protective equipment must be worn when mixing and applying this product. The thermoplastic powder 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.

Incompatible materials

: Keep in ventilated area when possible. Store in a cool, dry area and away from acids or oxidizers.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredient name	Exposure limits
calcium carbonate	CA Quebec Provincial (Canada, 1/2014). TWAEL: 10 mg/m ³ 8 hours. Form: Total dust. CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 10 mg/m ³ 8 hours.
titanium dioxide	CA British Columbia Provincial (Canada, 5/2019). TWA: 3 mg/m ³ 8 hours. Form: Respirable dust TWA: 10 mg/m ³ 8 hours. Form: Total dust CA Quebec Provincial (Canada, 1/2014). TWAEL: 10 mg/m ³ 8 hours. Form: Total dust. CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 10 mg/m ³ 8 hours. CA Ontario Provincial (Canada, 1/2018). TWA: 10 mg/m ³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 20 mg/m ³ 15 minutes. TWA: 10 mg/m ³ 8 hours.

Exposure controls

Ventilation and engineering measures

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Respiratory protection : Up to 0.5 mg/m³: (APF = 10) Any particulate respirator equipped with an N95, R95, or P95 filter (including N95, R95, and P95 filtering face pieces) except quarter-mask respirators. The following filters may also be used: N99, R99, P99, N100, R100, P100. APF = Assigned Protection Factor. Recommendations apply only to National Institute for Occupational Safety and Health (NIOSH) approved respirators. Refer to the NIOSH Pocket Guide to Chemical Hazards for more information.

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.

General Protections

: If an Occupational Exposure Limits (OELs) for a hazardous substance at your workplace differs between provinces you are operating in, it is best to adopt the higher standard and the province with the lower OEL. Generally, all OELs stem from the ACGIH TLVs. But there can be some differences between provinces and employers still need to check their own provincial regulations

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Granular Solid
Color	: White / Yellow
Odour	: Odourless
Odour threshold	: Not available.
pH	: Not available.
Melting point/freezing point	: Not available.
Initial boiling point and boiling range	: Not available.
Flash point	: Closed cup: >260°C (>500°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
Vapour pressure	: Not available
Vapour density	: Not available
Relative density / Specific gravity	: Not available
Other solubility(ies)	: None known
Partition coefficient:	: Not available. : Not applicable
Auto-ignition temperature	: Not available
Decomposition temperature	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: The product is stable and non-reactive under normal conditions of use.
Chemical stability	: The product is stable at or below 230°C.
Possibility of hazardous	: Polymerization will not occur.
Conditions to avoid	: Temperatures above 204°C (400°F)
Incompatible materials	: No specific data.
Hazardous decomposition products	: Carbon Monoxide, Carbon Dioxide

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	-
Titanium dioxide	LD50 Oral	Rat	> 10,000 mg/kg	(inhalation, rat): >6820 mg/m3 (4 Hr)
	LD50 Dermal	Rabbit	> 10,000 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	-
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SECTION 12. ECOLOGICAL INFORMATION

Toxicity

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

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

Global inventory

Chemical name	CAS number	Canada (DSL)	United States (TSCA)
Calcium carbonate / Limestone	1317-65-3	yes	yes
Titanium dioxide	13463-67-7	yes	yes

SECTION 16. OTHER INFORMATION

Key to abbreviations :

ACGIH: American Conference of Government Industrial Hygienists.

OSHA: Occupational Safety & Health Administration.

PEL: Permissible Exposure Limits.

TLV: Threshold Limits Value.

TWA: Time Weighted Average

Preparation Date (mm/dd/yyyy)

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Other special considerations for handling

: Provide adequate information, instruction and training for operators.

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