

SAFETY DATASHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label: GENTEM WATERBORNE ROAD MARKING PAINT

Other means of identification: WATERBORNE TRAFFIC MARKING PAINT

Product Code: GT5001, GT5002

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

Chemical family : Mixture

Name, address, and telephone number Name, address, and telephone number of

of the supplier: the manufacturer:

Gentem Inc. See supplier

35 Fraser Court, Unit 2 Barrie, Ontario L4N 5J5

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

This product is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200).

Label elements

Hazard Pictogram(s)



Signal Word Warning

Hazard Statement(s)

H302: Harmful if swallowed

Precautionary Statement(s)

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233: Keep container tightly closed.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P270: Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P307+P311: IF exposed: Call a POISON CENTER or doctor/physician.

P308+P313: IF exposed or concerned: Get medical advice/attention.

Other hazards

Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause sore throat. May cause mild skin irritation. May be harmful if absorbed through the skin. May be harmful if inhaled. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.



SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	Common name and synonyms	CAS#	Concentration (% by weight)
Titanium dioxide	Not available	13463-67-7	3.0-7.0
Methyl Alcohol	Methanol	67-56-1	1.0-5.0
Ammonia	Ammonium hydroxide	1331-21-6	0.1-1.0
Calcium Carbonate	Limestone	1317-65-3	30.0-60.0

The exact concentrations of the above listed chemicals are being withheld as a trade secret. The ingredients listed are encapsulated within the matrix; therefore, no exposure to these materials is expected during proper use/handling of this product.

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

Ingestion : Do not induce vomiting. Never give anything by mouth to an unconscious

person. Consult a physician if necessary.

Inhalation : Move person to fresh air and keep comfortable for breathing. If breathing has

stopped give artificial respiration. If breathing is difficult give oxygen by qualified medical personnel only. Obtain medical attention if coughing or other symptoms

persist.

Skin Contact : Remove/take off all contaminated clothing. Flush skin with running water and

wash affected areas thoroughly with soap and water. Wash contaminated

clothing before reuse. If skin irritation persists contact a physician.

Eye Contact : Rinse with plenty of water. Remove contact lenses if present and easy to do.

Continue rinsing. If irritation persists obtain medical attention.

Most Important Symptoms and Effects (both acute and delayed)

: No information available.

Indication of any immediate medical attention and special treatment needed

: Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

: Use water fog or fine spray, foams, carbon dioxide, or dry chemical.

Unsuitable Extinguishing Media

: Do not use a solid water stream as it may scatter and spread fire.

Flammability classification (OSHA 29 CFR 1910.106)

: Not available.

Hazardous combustion products

: None known.

Special hazards arising from the substance or mixture / Conditions of flammability

: Product can splatter above 100C/212F. Dried product can burn.

Special protective equipment and precautions for firefighters

Protective equipment for fire-fighters

: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

Special fire-fighting procedures



: Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Refer to protective measures listed in Sections 7 and 8. Material can create slippery conditions.

Environmental precautions

: Avoid releases to the environment and prevent material from entering sewers, natural waterways or storm water management systems.

Methods and material for containment and cleaning up

: Ventilate the area. Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. Contain spillage, and then collect with non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer container for disposal according to local/national regulations. Contact the proper local authorities.

Special spill response procedures

: Not available.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

: Use only in well-ventilated areas. Avoid breathing mist or vapor. Avoid contact with skin, eyes, and clothing. Keep container tightly closed. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Conditions for safe storage

: Store locked up. Store in cool/well ventilated and dry place out of sun. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Keep from freezing, product stability may be affected. Stir before use.

Incompatible materials

: Not available

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:				
Chemical Name	A	CGIH TLV	OSH	A PEL
	TWA	STEL	PEL	STEL
Titanium dioxide	10mg/m ³	N/Av	15mg/m ³ (total dust)	N/Av
Methyl Alcohol	200ppm (skin)	250ppm (skin)	200ppm (260mg/m ³)	N/Av
Ammonia	25ppm	35ppm	50ppm (35mg/m ³)	N/Av
Calcium Carbonate	N/Av	N/Av	15mg/m³ (total dust) 5mg/m³ (respirable	N/Av
			dust)	

Exposure controls

Ventilation and engineering measures

: Use only in well-ventilated areas. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In case of insufficient ventilation wear suitable respiratory equipment.

Respiratory protection

: If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Respirators should be selected based on the form and concentration of contaminants in air and in accordance with





OSHA (29 CFR 1910.134) or CSA Z94.4-02. Advice should be sought from

respiratory protection specialists.

Skin protection : Wear protective gloves. Advice should be sought from glove suppliers.

: Safety glasses with side shields or chemical splash goggles. Eye / face protection

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

: Avoid breathing mist or vapor. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Do not take

contaminated clothing home. Handle in accordance with good industrial

hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

: White thick liquid **Appearance** Odour : Ammonia Odour threshold : Not applicable

рΗ :>9.5

Melting point/freezing : Not available

point

Initial boiling point and : 100°C (212°F) Water

boiling range

Flash point : Not available Flash point (method) : Not available **Evaporation rate** : Not available **Flammability** : Not available

(solid, gas)

Lower flammability : Not available

limit (% by volume)

Upper flammability limit: Not available

(% by volume)

Oxidizing properties : Not available **Explosive** properties : Not available : Not available Vapour pressure Vapour density : Not available Relative density / : 10.5±0.2 lbs/gal

Specific gravity

Solubility in water : Soluble Other solubility(ies) : None known

Partition coefficient: n-octanol/water or Coefficient of water/oil distribution

: Not applicable

Auto-ignition

: Not applicable

temperature

Decomposition : Not available

temperature

Volatiles (% by weight) : Not available Volatile organic : <100g/L

compounds (VOCs)

Absolute pressure of : Not applicable

container

Flame projection length: Not applicable

Other physical/ : No additional information

chemical comments

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not normally reactive.

Chemical stability : Stable under normal conditions.

Possibility of hazardous: None known.

reactions

Conditions to avoid : Direct sources of heat. Do not use in areas without adequate ventilation. Avoid

with incompatible materials. Do not freeze or overheat.

Incompatible materials : None known.

SDS Preparation Date (mm/dd/yyyy): 05/13/2025



Hazardous: May yield acrylic monomers.

decomposition products

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry inhalation : Yes
Routes of entry skin and eye : Yes
Routes of entry ingestion : Yes
Routes of exposure skin : Yes

Absorption

Potential health effects:

Signs and symptoms of short-term (acute) exposure

Signs and symptoms Inhalation

: May cause irritation of respiratory tract.

Signs and symptoms ingestions

: Ingestion may cause gastrointestinal irritation, nausea, vomiting and

diarrhea.

Signs and symptoms skin : Direct skin contact may cause irritation. Signs and symptoms eyes : Direct eye contact may cause irritation.

Potential Chronic Health Effects

: None known

Mutagencity: Not expected to be mutagenic in humans.

Carcinogenicity: Not classifiable as a human carcinogen. Contains titanium dioxide.

Titanium dioxide is classified as possibly carcinogenic by IARC (Group 2B). The ingredients listed in Section 3 are encapsulated within the matrix, therefore, no exposure to these materials is expected during

proper use/handling of this product.

Reproductive effects and teratogenicity

: Not expected to cause reproductive effects.

Sensitization to material : Not expected to be a skin or respiratory sensitizer.

Specific target organ effects: This product is not expected to cause target organ toxicity through

single or repeated exposures.

Medical conditions aggravated by overexposure

: None known.

Synergistic materials: No information available.

Toxicological data : There is no available data for the product itself, only for the

ingredients. See below for individual ingredient acute toxicity data.

Chemical name	<u>LC₅₀ (4hr)</u>	<u>LD₅₀</u>		
	inh, rat	(Oral, rat)	(Rabbit, dermal)	
Titanium dioxide	>6.82mg/kg (dust)(No mortality)	>25000mg/kg	>10000mg/kg	
Methyl Alcohol	> 5000ppm/6H (4.1 mg/L/4H (vapour))	5628 mg/kg The estimated human lethal dose is: 300-1000mg/kg	> 393 mg/kg (Monkey) 15 800mg/kg (rabbit)	
Ammonia	3670ppm/4H (cited as 7338ppm/1hour)	350 mg/kg	Not Available	
Calcium carbonate	>3mg/L (aerosol)(No mortality)	6450mg/kg	>2000mg/kg (No mortality)	

Other important toxicological hazards

: No information available.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity : Do not release, unmonitored, into the environment. See below for individual

ingredient ecotoxicity.

Ecotoxicity data:



<u>Ingredients</u>	CAS#		Toxicity to Fish					
•		LC50 / 96h	NOEC / 21 day	M Factor				
Titanium dioxide	13463-67-7	>100mg/L (Japanese ricefish)	N/Av	None				
Methyl Alcohol	67-56-1	15 400 mg/L (Bluegill sunfish)	446.7 mg/L/28day (Fathead minnow) (QSAR)	None				
Ammonia	1331-21-6	0.163-1.09 mg/L (Rainbow Trout)	Not Available	1				
Calcium carbonate	1317-65-3	>100mg/L (Rainbow trout)	N/Av	None				

<u>Ingredients</u>	CAS#	Toxicity to Daphnia				
		EC50 / 96h	NOEC / 21 day	M Factor		
Titanium dioxide	13463-67-7	>100mg/L (Daphnia magna)	N/Av	None		
Methyl Alcohol	67-56-1	10000mg/L (48hr) (Daphnia magna)	208mg/L (QSAR)	None		
Ammonia	1331-21-6	101mg/L (Water flea)	Not Available	None		
Calcium carbonate	1317-65-3	>100mg/L (Daphnia magna)	N/Av	None		

<u>Ingredients</u>	CAS#	Toxicity to Algae					
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor			
Titanium dioxide	13463-67-7	>100mg//72hr (Green algae)	N/Av	None			
Methyl Alcohol	67-56-1	22000mg/L (96hr) (Green algae)	Not Available	None			
Ammonia	1331-21-6	Not Available	Not Available	None			
Calcium carbonate	1317-65-3	>14mg/L/72hr (Green algae)	14mg/L/72hr	None			

Persistence and degradability Bioaccumulative potential

Mobility in soil
Other adverse effects

: No data is available on the product itself.: No data is available on the product itself.: The product itself has not been tested.

: None known.

SECTION 13. DISPOSAL CONSIDERATIONS

Handling of Disposal : Handle in accordance with good industrial hygiene and safety practice.

Refer to protective measures listed in Sections 7 and 8.

Methods of Disposal : Dispose of in accordance with all federal, state, provincial and local

regulations.

RCRA : It is the responsibility of the waste generator to determine the proper

waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental

agencies.

SECTION 14. TRANSPORT INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
49CFR/DOT	None	Not regulated	Not regulated	None	
49CFR/DOT Addtitional information	None				
TDG	None	Not regulated	Not regulated	None	
TDG Additional information	None				

Special precautions for user : Appropriate advice on safety must accompany the package.

Environmental hazards: See ECOLOGICAL INFORMATION, Section 12.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: This information is not available.

SECTION 15. REGULATORY INFORMATION



US Federal Information:

Components listed below are present on the following U.S. Federal chemical lists:

Ingredients	CAS#	TSCA Inventory	CERCLA Reportable Quantity(RQ) (40 CFR 117.302):	SARA TITLE III: Sec 302, Extremely Hazardous Substance, 40 CFR 355:	SARA TITLE III: Sec. 313, 4 CFR 372, Specific Toxic Chemical	
					Toxic Chemical	de minimus concentration
Titanium dioxide	13463-67-7	Yes	None	None	No	N/Ap
Methyl Alcohol	67-56-1	Yes	5000lbs/2270kg	None	Yes	1%
Ammonia	1331-21-6	Yes	100lbs/45.4kg	500lbs TPQ	Yes	1%
Calcium carbonate	1317-65-3	Yes	None	None	No	N/Ap

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 372 Hazard Classes: Not available

US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

Ingredients	CAS#	Californi	alifornia Proposition 65		State "Right to Know" Lists				
		Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Titanium dioxide	13463- 67-7	Yes	Cancer (airborne particles of respirable size)	No	Yes	Yes	Yes	Yes	Yes
Methyl Alcohol	67-56-1	No	Developmental	Yes	Yes	Yes	Yes	Yes	Yes
Ammonia	1331- 21-6	No	Not listed	Yes	Yes	Yes	Yes	Yes	Yes
Calcium carbonate	1317- 65-3	No	N/Ap	No	Yes	Yes	Yes	Yes	Yes

Canadian Information:

Canadian Environmental Protection Act (CEPA): All ingredients are present on the DSL

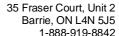
International Information:

Components listed below are present on the following International Inventory list:

Ingredients	CAS#	European EINECs	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	New Zealand IOC
Titanium dioxide	13463- 67-7	236-675-5	Present	Present	(5)- 5225; (1)-558	KE-33900	Present	May be used as a single component chemical under an appropriate group standard.
Methyl Alcohol	67-56-1	200-659-6	Present	Present	(2)-201	KE-23193	Present	HSR001186

International Information continued:

Ingredients	CAS#	European EINECs	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	New Zealand IOC
Ammonia	1331- 21-6	231-635-3	Present	Present	(1)-391	KE-01625	Present	HSR001035
Calcium carbonate	1317- 65-3	215-279-6	Present	Present	(1)-122	KE-21996	Present	May be used as a single component





				chemical
				under an
				appropriate
				group
				standard.

SECTION 16. OTHER INFORMATION

Legend

: ACGIH: American Conference of Governmental Industrial Hygienists

AICS: Australian Inventory of Chemical Substance

CAS: Chemical Abstract Services

CERCLA: Comprehensive Environmental Response, Compensation, and

Liability Act of 1980

CFR: code of Federal Regulations CSA: Canadian Standards Association DOT: Department of Transportation ECHA: European Chemicals Agency

ENCS: Existing and New Chemical Substances

EPA: Environmental Protection Agency

IARC: International Agency for Research on Cancer IECSC: Inventory of Existing Chemical Substances IMDG: International Maritime Dangerous Goods

IOC: Inventory of Chemicals

KECI: Korean Existing Chemicals Inventory KECL: Korean Existing Chemicals List

LC: Lethal Concentration

LD: Lethal Dose

NIOSH: National Institute of Occupational Safety and Health

NOEC: No observable effect concentration

OECD: Organization for Economic Co-operation and Development

OSHA: Occupational Safety and Health Administration

PEL: Permissible exposure limit

PICCS: Philippine Inventory of Chemicals and Chemical Substances

SARA: Superfund Amendments and Reauthorization Act

STEL: Short Term Exposure Limit

TDG: Canadian Transportation of Dangerous Goods Act & Regulations

TLV: Threshold Limit Values TSCA: Toxic Substance control Act TWA: Time Weighted Average

Preparation Date (mm/dd/yyyy)

: 05/13/2024

Other special considerations for handling

: Provide adequate information, instruction and training for operators.

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