EF Series

PAVEMARK® Thermoplastic

PRODUCT DATA

Product Type:	Alkyd Extrude Thermoplastic	
Product Code:	884056	884069
Product Color:	White	Lead Free Yellow
Description:	TM WHT ALK NYC EXTRD	
	TM LF YEL ALK NYC EXTRD	
Specification:	Meets New York City	
Effective Date:	August 1, 2014	

Product Description:
Ennis-Flint's Alkyd Extrude Thermoplastic Pavement Marking Material is a 100% solids material blend of binder, pigments and glass beads that must be melted to a temperature of at least 400˚F (203˚C), mixed well and applied in a molten/liquid state to the pavement. Roadway surface temperature at the time of application should be 50˚F (10˚C) and rising. Upon cooling to normal pavement temperature, thermoplastic provides a very durable marking material for low and high volume traffic areas.

Product Advantages:

- Non-flammable and below 150 VOC
- Demonstrates excellent bead retention and abrasion resistance
- Fast set up keeps traffic control to a minimum when striping
- Can be used for symbols, legends and lane marking
- A low cost per useful life durable form of delineation

Packaging:
Thermoplastic is sold in one ton increments (2000 pounds). The ton is divided into 40 heat degradable bags each weighing approximately 50 pounds.

Storage:
The shelf life of the product is one year from date of manufacture with proper storage. Proper storage includes inside or covered to prevent from moisture, and below 120F. Outside storage for short intervals is acceptable as long as the material is kept dry. The older the material, more agitation and dwell time is required to fully melt and mix the granular ingredients.

Conditions for Application:
All surfaces must be clean, dry and free from oil, grease, antifreeze, loose sand, aggregate and chipping/peeling existing striping. Any curing compounds used on new concrete must be mechanically abraded off prior to striping and use of a primer is strongly suggested. Concrete should be allowed to cure 14 days. When in doubt, always test adhesion. While thermoplastic may be installed behind the paver once the mat cools, new asphalt should be allowed to cure for a minimum of 14 days to maximize adhesion and durability.

Coverage:
One tons yields approximately 6000 feet of 4" stripe @ 90 mils – surface texture will decrease the yield.

Physical Characteristics:

% Binder	**20% minimum**
% Glass:	**30-40%**
Intermix glass spec:	**M-247 type I**
% TiO2 in the white:	**10% minimum**
595B color, white:	**17886**
595B color, yellow:	**13538**
White Reflectance (Y value):	**75 minimum**
Yellow Reflectance (Y value):	**45 minimum**
Minimum Impact Resistance:	**10 inch pounds**
Softening Point:	**200-230°F**
Yellowness index, white:	**0.12 maximum**
Specific gravity:	**2.15 maximum**

Dry Time: With drop on glass beads applied, the thermoplastic material shall be sufficiently tack-free to carry traffic in not more than 2 minutes when pavement surface temperature is at 50˚F, and not more than 10 minutes when pavement surface temperature is 130ºF.

Limitations: Applying a test strip to determine if surface is dry enough if there has been rain in the last 24 hours.

- Do not apply if hot material shows moisture bubbles.
- Do not heat thermoplastic above 450°F.
- Do not apply when road and ambient temperatures are below 50°F.
- Do not apply when temperatures are near or below the dew point.
- Material at application is hot – please wear personal protective equipment as described in MSDS.

The product data offered herein is, to the best of our knowledge, true and accurate, but all recommendations are made without warranty, expressed or implied. Because the conditions of use are beyond our control, neither Ennis-Flint nor its agents shall be liable for any injury, loss or damage, direct or consequential, arising from the use or the inability to use the product described herein. As Ennis-Flint has neither control over the installation of product described herein nor control of the environmental factors the installed markings are subjected to, there is no guarantee as to the durability or the retroreflective properties of any marking system applied. No person is authorized to make any statement or recommendation not contained in the Product Data, and any such statement or recommendation, if made, shall not bind the Corporation. Further, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents, and no license under the claims of any patent is either implied or granted.

ENNIS-FLINT
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Safety Data Sheet

Section 1. Identification

Product Code:	884056
Product Name:	TM NYC WHT ALK EXT
Product Type:	Thermoplastic
Recommended Use:	Traffic Markings
Supplied by:	Ennis-Flint, Inc. 4161 Piedmont Parkway, Suite 370 Greensboro, NC 27410 T: 800.331.8118
Emergency Telephone:	Chemtrec 1-800-424-9300

2. Hazards Identification

EMERGENCY OVERVIEW: This product contains a component suspected of causing cancer. However, it is in a non-respirable form and inhalation is unlikely to occur from exposure. This classification is relevant when exposed to dust or powder form only (e.g. sanding, grinding).

GHS Classification
Carc. 2

Symbol(s) of Product

Signal Word
Warning

GHS HAZARD STATEMENTS

Carcinogenicity, category 2	H351	Suspected of causing cancer.

GHS PRECAUTIONARY STATEMENTS

P201	Obtain special instructions before use.
P281	Use personal protective equipment as required.
P308+P313	IF exposed or concerned: Get medical advice/attention.

3. Composition/Information on Ingredients

Chemical Name	CAS-No.	Wt. %	GHS Symbols	GHS Statements
Calcium Carbonate	1317-65-3	25-50	No Information	No Information
Glass Oxide; Glass	65997-17-3	25-50	No Information	No Information
Titanium Dioxide	13463-67-7	2.5-10	No Information	No Information
Crystalline Silica, Quartz	14808-60-7	0.1-1.0	GHS08	H351

4. First-aid Measures

FIRST AID - GENERAL ADVICE: Consult a physician if symptoms persist.

FIRST AID - INHALATION: Move to fresh air.

FIRST AID - INGESTION: Do NOT induce vomiting. If conscious, rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

FIRST AID - SKIN CONTACT: In case of BURNS, remove patient from heat source. Immediately cool affected skin for as long as possible with cold water. Remove smoldering clothing, including shoes, boots and jewelry unless adhering to skin. Do not remove clothing if adhering to skin. Do not attempt to remove the molten thermoplastic from the skin. Removal could result in severe tissue damage. Cover patient with dry clean sheet. Conduct primary survey. If indicated, transport patient to emergency treatment facility. Wash affected area immediately with soap and plenty of water. Remove contaminated clothing and launder before reuse. Consult a physician if symptoms persist.

FIRST AID - EYE CONTACT: Contact with molten materials requires immediate medical assistance. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician if symptoms persist.

MOST IMPORTANT SYMPTOMS AND EFFECTS: None under normal processing.

NOTES TO PHYSICIAN: None known based on information supplied.

5. Fire-fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: None expected.

SPECIAL FIREFIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

EXTINGUISHING MEDIA: Alcohol Foam, Carbon Dioxide, Dry Chemical, Water Fog

6. Accidental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Ensure adequate ventilation. Take up mechanically. Keep in suitable and closed containers for disposal. Avoid dust formation. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Allow molten material to cool. Then dispose of according to federal and state regulations.

ENVIRONMENTAL PRECAUTIONS: Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

EMERGENCY ADVICE: Under normal usage or contained spills, this material should not pose a significant emergency risk.

PERSONAL PRECAUTIONS: Use personal protective equipment.

7. Handling and Storage

HANDLING: Ensure adequate ventilation. Avoid breathing vapor, mists or dust. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Observe good industrial hygiene practices. 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 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 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 in a dry and well-ventilated place. Keep in properly labeled containers.

8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

Chemical Name	ACGIH TLV-TWA	ACGIH-TLV STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Calcium Carbonate	N.E.	N.E.	15 mg/m3	N.E.
Glass Oxide; Glass	N.E.	N.E.	N.E.	N.E.
Titanium Dioxide	10 mg/m3	N.E.	15 mg/m3	N.E.
Crystalline Silica, Quartz	0.025 mg/m3	N.E.	0.05 mg/m3	N.E.

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation Sk = Skin Sensitizer N.E. = Not Established

Personal Protection

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.

SKIN PROTECTION: Protective gloves/clothing. Use of long sleeved shirts is required when handling molten material.

EYE PROTECTION: Safety glasses with side-shields. Use of a faceshield is recommended when handling molten material.

OTHER PROTECTIVE EQUIPMENT: Eyewash stations, safety showers, ventilation systems.

HYGIENIC PRACTICES: When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

ENGINEERING CONTROLS: Use in a well ventilated area.

9. Physical and Chemical Properties

Appearance:	White	**Physical State:**	Solid
Odor:	Odorless	**Odor Threshold:**	Not Established
Density, g/cm3:	2.057	**pH:**	Not Applicable
Freeze Point, °C:	Not Applicable	**Viscosity:**	No Information
Solubility in Water:	Insoluble	**Partition Coefficient, n-octanol/ water:**	Not Applicable
Decomposition temperature, °C	Not Applicable		
Boiling Range, °C:	Not Determined	**Explosive Limits, %:**	Not Determined
Combustibility:	Does not Support Combustion	**Flash Point, °C:**	>260
Evaporation Rate:	N/A	**Auto-Ignition Temperature, °C**	>260
Vapor Density:	Heavier than air	**Vapor Pressure, mmHg:**	Not Applicable

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

REACTIVITY: Stable under normal conditions.

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Avoid temperatures above 260 °C. Dust formation. Dust may form explosive mixture in air. Heat, flames and sparks.

INCOMPATIBILITY: None known based on information supplied.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides. Nitrogen oxides.

11. Toxicological Information

Practical Experiences

MOST IMPORTANT SYMPTOMS AND EFFECTS: None under normal processing.

EFFECT OF OVEREXPOSURE - INHALATION: Inhalation of dust in high concentration may cause irritation of respiratory system. In molten state, the material does not give off fumes that are toxic or injurious to persons or property. However, 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.

EFFECT OF OVEREXPOSURE - INGESTION: Ingestion may cause irritation to mucous membranes.

EFFECT OF OVEREXPOSURE - SKIN CONTACT: Direct skin contact may cause irritation. The molten product can cause serious burns.

EFFECT OF OVEREXPOSURE - EYE CONTACT: Direct eye contact may cause irritation. The molten product can cause serious burns.

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. Inhalation exposure to respirable levels of crystalline silica may cause respiratory impairment and lung damage. This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen.

CARCINOGENICITY: This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Inhalation, Skin Contact

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
1317-65-3	Calcium Carbonate	> 2000 mg/kg	> 2000 mg/kg	>20001 ppm (Gas/Mist)
65997-17-3	Glass Oxide; Glass	>2000 mg/kg	> 2000 mg/kg	>20001 ppm (Gas/Mist)
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	N.I.	>20001 ppm (Gas/Mist)
14808-60-7	Crystalline Silica, Quartz	>2000 mg/kg	> 2000 mg/kg	>20001 ppm (Gas/Mist)

N.I. = No Information

12. Ecological Information

ECOLOGICAL INFORMATION: The environmental impact of this product has not been fully investigated. Do not contaminate ponds, waterways or ditches with this material.

PRESISTENCE AND DEGRADABILITY: No Information

BIOACCUMULATIVE POTENTIAL: No Information

MOBILITY: No Information

OTHER ADVERSE ECOLOGICAL EFFECTS: No Information

13. Disposal Information

Product

DISPOSAL METHOD: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Dispose of contents/ container in accordance with the local/regional/national/international regulations.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Ensure adequate ventilation. Take up mechanically. Keep in suitable and closed containers for disposal. Avoid dust formation. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

CONTAMINATED PACKAGING: Dispose of contents/ container in accordance with the local/regional/national/international regulations.

14. Transport Information

SPECIAL TRANSPORT PRECAUTIONS: When in use, this product is elevated temperature liquid, n.o.s. (compound pavement marking), UN3257, Hazard Class 9, Packing Group III.

Road Transport

UN Number:	Not Regulated
Shipping Name:	Not Regulated
Transport Hazard Class:	Not Regulated
Packing Group:	Not Applicable
ERG No:	Not Regulated

Sea Transport

UN Number:	Not Regulated
Shipping Name:	Not Regulated
IMDG Class:	Not Regulated
Packing Group:	Not Applicable
EmS-No:	Not Regulated
Marine Pollutant:	Not A Marine Pollutant

Air Transport

UN Number:	Not Regulated
Shipping Name:	Not Regulated
IATA Class:	Not Regulated
Packing Group:	Not Applicable

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Carcinogenicity

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA components exist in this product.

U.S. State Regulations:

NEW JERSEY RIGHT-TO-KNOW:

The following materials are hazardous or among the top five components in this product.

Chemical Name	CAS-No.
Calcium Carbonate	1317-65-3
Glass Oxide; Glass	65997-17-3
Titanium Dioxide	13463-67-7
Rosin, Maleated, Polymer With Glycerol	68038-41-5
Crystalline Silica, Quartz	14808-60-7

PENNSYLVANIA RIGHT-TO-KNOW

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS-No.
Calcium Carbonate	1317-65-3
Glass Oxide; Glass	65997-17-3
Titanium Dioxide	13463-67-7
Rosin, Maleated, Polymer With Glycerol	68038-41-5
Petroleum Hydrocarbon Resin	64742-16-1
Crystalline Silica, Quartz	14808-60-7

CALIFORNIA PROPOSITION 65 CARCINOGENS

WARNING

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

Chemical Name	CAS-No.
Titanium Dioxide	13463-67-7
Crystalline Silica, Quartz	14808-60-7

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

WARNING

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

No Proposition 65 Reproductive Toxins exist in this product.

International Regulations: As follows -

CANADIAN WHMIS:

This SDS has been prepared in compliance with Controlled Product Regulations.

16. Other Information

Revision Date: 2/23/2021 **Supersedes Date:** 2/2/2021

Datasheet produced by: Regulatory Department

HMIS Ratings:

Health:	3	**Flammability:**	1	**Reactivity:**	0	**Personal Protection:**	X

NFPA Ratings:

Health:	1	**Flammability:**	1	**Reactivity:**	0	**Hazards:**	N.I.

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product where instructions and recommendations are not followed. Any use of the product not in conformance with this SDS or in combination with any other product or process is the responsibility of the user.

Safety Data Sheet

Section 1. Identification

Product Code:	884069
Product Name:	TM NYC YEL ALK EXT
Product Type:	Thermoplastic
Recommended Use:	Traffic Markings
Supplied by:	Ennis-Flint, Inc. 4161 Piedmont Parkway, Suite 370 Greensboro, NC 27410 T: 800.331.8118
Emergency Telephone:	Chemtrec 1-800-424-9300

2. Hazards Identification

EMERGENCY OVERVIEW: This product contains a component suspected of causing cancer. However, it is in a non-respirable form and inhalation is unlikely to occur from exposure. This classification is relevant when exposed to dust or powder form only (e.g. sanding, grinding).

GHS Classification
Carc. 2

Symbol(s) of Product

Signal Word
Warning

GHS HAZARD STATEMENTS

Carcinogenicity, category 2	H351	Suspected of causing cancer.

GHS PRECAUTIONARY STATEMENTS

P201	Obtain special instructions before use.
P281	Use personal protective equipment as required.
P308+P313	IF exposed or concerned: Get medical advice/attention.

3. Composition/Information on Ingredients

Chemical Name	CAS-No.	Wt. %	GHS Symbols	GHS Statements
Calcium Carbonate	1317-65-3	25-50	No Information	No Information
Glass Oxide; Glass	65997-17-3	25-50	No Information	No Information
Titanium Dioxide	13463-67-7	1.0-2.5	No Information	No Information
Crystalline Silica, Quartz	14808-60-7	0.1-1.0	GHS08	H351

4. First-aid Measures

FIRST AID - GENERAL ADVICE: Consult a physician if symptoms persist.

FIRST AID - INHALATION: Move to fresh air.

FIRST AID - INGESTION: Do NOT induce vomiting. If conscious, rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

FIRST AID - SKIN CONTACT: In case of BURNS, remove patient from heat source. Immediately cool affected skin for as long as possible with cold water. Remove smoldering clothing, including shoes, boots and jewelry unless adhering to skin. Do not remove clothing if adhering to skin. Do not attempt to remove the molten thermoplastic from the skin. Removal could result in severe tissue damage. Cover patient with dry clean sheet. Conduct primary survey. If indicated, transport patient to emergency treatment facility. Wash affected area immediately with soap and plenty of water. Remove contaminated clothing and launder before reuse. Consult a physician if symptoms persist.

FIRST AID - EYE CONTACT: Contact with molten materials requires immediate medical assistance. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician if symptoms persist.

MOST IMPORTANT SYMPTOMS AND EFFECTS: None under normal processing.

NOTES TO PHYSICIAN: None known based on information supplied.

5. Fire-fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: None expected.

SPECIAL FIREFIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

EXTINGUISHING MEDIA: Alcohol Foam, Carbon Dioxide, Dry Chemical, Water Fog

6. Accidental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Ensure adequate ventilation. Take up mechanically. Keep in suitable and closed containers for disposal. Avoid dust formation. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Allow molten material to cool. Then dispose of according to federal and state regulations.

ENVIRONMENTAL PRECAUTIONS: Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

EMERGENCY ADVICE: Under normal usage or contained spills, this material should not pose a significant emergency risk.

PERSONAL PRECAUTIONS: Use personal protective equipment.

7. Handling and Storage

HANDLING: Ensure adequate ventilation. Avoid breathing vapor, mists or dust. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Observe good industrial hygiene practices. 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 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 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 in a dry and well-ventilated place. Keep in properly labeled containers.

8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

Chemical Name	ACGIH TLV-TWA	ACGIH-TLV STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Calcium Carbonate	N.E.	N.E.	15 mg/m3	N.E.
Glass Oxide; Glass	N.E.	N.E.	N.E.	N.E.
Titanium Dioxide	10 mg/m3	N.E.	15 mg/m3	N.E.
Crystalline Silica, Quartz	0.025 mg/m3	N.E.	0.05 mg/m3	N.E.

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation Sk = Skin Sensitizer N.E. = Not Established

Personal Protection

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.

SKIN PROTECTION: Protective gloves/clothing. Use of long sleeved shirts is required when handling molten material.

EYE PROTECTION: Safety glasses with side-shields. Use of a faceshield is recommended when handling molten material.

OTHER PROTECTIVE EQUIPMENT: Eyewash stations, safety showers, ventilation systems.

HYGIENIC PRACTICES: When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

ENGINEERING CONTROLS: Use in a well ventilated area.

9. Physical and Chemical Properties

Appearance:	Yellow	**Physical State:**	Solid
Odor:	Odorless	**Odor Threshold:**	Not Established
Density, g/cm3:	2.007	**pH:**	Not Applicable
Freeze Point, °C:	Not Applicable	**Viscosity:**	No Information
Solubility in Water:	Insoluble	**Partition Coefficient, n-octanol/ water:**	Not Applicable
Decomposition temperature, °C	Not Applicable		
Boiling Range, °C:	Not Determined	**Explosive Limits, %:**	Not Determined
Combustibility:	Does not Support Combustion	**Flash Point, °C:**	>260
Evaporation Rate:	N/A	**Auto-Ignition Temperature, °C**	>260
Vapor Density:	Heavier than air	**Vapor Pressure, mmHg:**	Not Applicable

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

REACTIVITY: Stable under normal conditions.

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Avoid temperatures above 260 °C. Dust formation. Dust may form explosive mixture in air. Heat, flames and sparks.

INCOMPATIBILITY: None known based on information supplied.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides. Nitrogen oxides.

11. Toxicological Information

Practical Experiences

MOST IMPORTANT SYMPTOMS AND EFFECTS: None under normal processing.

EFFECT OF OVEREXPOSURE - INHALATION: Inhalation of dust in high concentration may cause irritation of respiratory system. In molten state, the material does not give off fumes that are toxic or injurious to persons or property. However, 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.

EFFECT OF OVEREXPOSURE - INGESTION: Ingestion may cause irritation to mucous membranes.

EFFECT OF OVEREXPOSURE - SKIN CONTACT: Direct skin contact may cause irritation. The molten product can cause serious burns.

EFFECT OF OVEREXPOSURE - EYE CONTACT: Direct eye contact may cause irritation. The molten product can cause serious burns.

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. Inhalation exposure to respirable levels of crystalline silica may cause respiratory impairment and lung damage. This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen.

CARCINOGENICITY: This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Inhalation, Skin Contact

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
1317-65-3	Calcium Carbonate	> 2000 mg/kg	> 2000 mg/kg	>20001 ppm (Gas/Mist)
65997-17-3	Glass Oxide; Glass	>2000 mg/kg	> 2000 mg/kg	>20001 ppm (Gas/Mist)
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	N.I.	>20001 ppm (Gas/Mist)
14808-60-7	Crystalline Silica, Quartz	>2000 mg/kg	> 2000 mg/kg	>20001 ppm (Gas/Mist)

N.I. = No Information

12. Ecological Information

ECOLOGICAL INFORMATION: The environmental impact of this product has not been fully investigated. Do not contaminate ponds, waterways or ditches with this material.

PRESISTENCE AND DEGRADABILITY: No Information

BIOACCUMULATIVE POTENTIAL: No Information

MOBILITY: No Information

OTHER ADVERSE ECOLOGICAL EFFECTS: No Information

13. Disposal Information

Product

DISPOSAL METHOD: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Dispose of contents/ container in accordance with the local/regional/national/international regulations.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Ensure adequate ventilation. Take up mechanically. Keep in suitable and closed containers for disposal. Avoid dust formation. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

CONTAMINATED PACKAGING: Dispose of contents/ container in accordance with the local/regional/national/international regulations.

14. Transport Information

SPECIAL TRANSPORT PRECAUTIONS: When in use, this product is elevated temperature liquid, n.o.s. (compound pavement marking), UN3257, Hazard Class 9, Packing Group III.

Road Transport

UN Number:	Not Regulated
Shipping Name:	Not Regulated
Transport Hazard Class:	Not Regulated
Packing Group:	Not Applicable
ERG No:	Not Regulated

Sea Transport

UN Number:	Not Regulated
Shipping Name:	Not Regulated
IMDG Class:	Not Regulated
Packing Group:	Not Applicable
EmS-No:	Not Regulated
Marine Pollutant:	Not A Marine Pollutant

Air Transport

UN Number:	Not Regulated
Shipping Name:	Not Regulated
IATA Class:	Not Regulated
Packing Group:	Not Applicable

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Carcinogenicity

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA components exist in this product.

U.S. State Regulations:

NEW JERSEY RIGHT-TO-KNOW:

The following materials are hazardous or among the top five components in this product.

Chemical Name	CAS-No.
Calcium Carbonate	1317-65-3
Glass Oxide; Glass	65997-17-3
Rosin, Maleated, Polymer With Glycerol	68038-41-5
Petroleum Hydrocarbon Resin	64742-16-1
Titanium Dioxide	13463-67-7
Crystalline Silica, Quartz	14808-60-7

PENNSYLVANIA RIGHT-TO-KNOW

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS-No.
Calcium Carbonate	1317-65-3
Glass Oxide; Glass	65997-17-3
Rosin, Maleated, Polymer With Glycerol	68038-41-5
Petroleum Hydrocarbon Resin	64742-16-1
Titanium Dioxide	13463-67-7
Crystalline Silica, Quartz	14808-60-7

CALIFORNIA PROPOSITION 65 CARCINOGENS

WARNING

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

Chemical Name	CAS-No.
Titanium Dioxide	13463-67-7
Crystalline Silica, Quartz	14808-60-7

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

WARNING

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

No Proposition 65 Reproductive Toxins exist in this product.

International Regulations: As follows -

CANADIAN WHMIS:

This SDS has been prepared in compliance with Controlled Product Regulations.

16. Other Information

Revision Date: 2/23/2021 **Supersedes Date:** 2/2/2021

Datasheet produced by: Regulatory Department

HMIS Ratings:

Health:	3	**Flammability:**	1	**Reactivity:**	0	**Personal Protection:**	X

NFPA Ratings:

Health:	1	**Flammability:**	1	**Reactivity:**	0	**Hazards:**	N.I.

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product where instructions and recommendations are not followed. Any use of the product not in conformance with this SDS or in combination with any other product or process is the responsibility of the user.

Safety Data Sheet

Section 1. Identification

Product Code:	884056
Product Name:	TM NYC WHT ALK EXT
Product Type:	Thermoplastic
Recommended Use:	Traffic Markings
Supplied by:	Ennis-Flint, Inc. 4161 Piedmont Parkway, Suite 370 Greensboro, NC 27410 T: 800.331.8118
Emergency Telephone:	Chemtrec 1-800-424-9300

2. Hazards Identification

EMERGENCY OVERVIEW: This product contains a component suspected of causing cancer. However, it is in a non-respirable form and inhalation is unlikely to occur from exposure. This classification is relevant when exposed to dust or powder form only (e.g. sanding, grinding).

GHS Classification
Carc. 2

Symbol(s) of Product

Signal Word
Warning

GHS HAZARD STATEMENTS

Carcinogenicity, category 2	H351	Suspected of causing cancer.

GHS PRECAUTIONARY STATEMENTS

P201	Obtain special instructions before use.
P281	Use personal protective equipment as required.
P308+P313	IF exposed or concerned: Get medical advice/attention.

3. Composition/Information on Ingredients

Chemical Name	CAS-No.	Wt. %	GHS Symbols	GHS Statements
Calcium Carbonate	1317-65-3	25-50	No Information	No Information
Glass Oxide; Glass	65997-17-3	25-50	No Information	No Information
Titanium Dioxide	13463-67-7	2.5-10	No Information	No Information
Crystalline Silica, Quartz	14808-60-7	0.1-1.0	GHS08	H351

4. First-aid Measures

FIRST AID - GENERAL ADVICE: Consult a physician if symptoms persist.

FIRST AID - INHALATION: Move to fresh air.

FIRST AID - INGESTION: Do NOT induce vomiting. If conscious, rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

FIRST AID - SKIN CONTACT: In case of BURNS, remove patient from heat source. Immediately cool affected skin for as long as possible with cold water. Remove smoldering clothing, including shoes, boots and jewelry unless adhering to skin. Do not remove clothing if adhering to skin. Do not attempt to remove the molten thermoplastic from the skin. Removal could result in severe tissue damage. Cover patient with dry clean sheet. Conduct primary survey. If indicated, transport patient to emergency treatment facility. Wash affected area immediately with soap and plenty of water. Remove contaminated clothing and launder before reuse. Consult a physician if symptoms persist.

FIRST AID - EYE CONTACT: Contact with molten materials requires immediate medical assistance. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician if symptoms persist.

MOST IMPORTANT SYMPTOMS AND EFFECTS: None under normal processing.

NOTES TO PHYSICIAN: None known based on information supplied.

5. Fire-fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: None expected.

SPECIAL FIREFIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

EXTINGUISHING MEDIA: Alcohol Foam, Carbon Dioxide, Dry Chemical, Water Fog

6. Accidental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Ensure adequate ventilation. Take up mechanically. Keep in suitable and closed containers for disposal. Avoid dust formation. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Allow molten material to cool. Then dispose of according to federal and state regulations.

ENVIRONMENTAL PRECAUTIONS: Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

EMERGENCY ADVICE: Under normal usage or contained spills, this material should not pose a significant emergency risk.

PERSONAL PRECAUTIONS: Use personal protective equipment.

7. Handling and Storage

HANDLING: Ensure adequate ventilation. Avoid breathing vapor, mists or dust. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Observe good industrial hygiene practices. 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 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 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 in a dry and well-ventilated place. Keep in properly labeled containers.

8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

Chemical Name	ACGIH TLV-TWA	ACGIH-TLV STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Calcium Carbonate	N.E.	N.E.	15 mg/m3	N.E.
Glass Oxide; Glass	N.E.	N.E.	N.E.	N.E.
Titanium Dioxide	10 mg/m3	N.E.	15 mg/m3	N.E.
Crystalline Silica, Quartz	0.025 mg/m3	N.E.	0.05 mg/m3	N.E.

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation Sk = Skin Sensitizer N.E. = Not Established

Personal Protection

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.

SKIN PROTECTION: Protective gloves/clothing. Use of long sleeved shirts is required when handling molten material.

EYE PROTECTION: Safety glasses with side-shields. Use of a faceshield is recommended when handling molten material.

OTHER PROTECTIVE EQUIPMENT: Eyewash stations, safety showers, ventilation systems.

HYGIENIC PRACTICES: When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

ENGINEERING CONTROLS: Use in a well ventilated area.

9. Physical and Chemical Properties

Appearance:	White	**Physical State:**	Solid
Odor:	Odorless	**Odor Threshold:**	Not Established
Density, g/cm3:	2.057	**pH:**	Not Applicable
Freeze Point, °C:	Not Applicable	**Viscosity:**	No Information
Solubility in Water:	Insoluble	**Partition Coefficient, n-octanol/ water:**	Not Applicable
Decomposition temperature, °C	Not Applicable		
Boiling Range, °C:	Not Determined	**Explosive Limits, %:**	Not Determined
Combustibility:	Does not Support Combustion	**Flash Point, °C:**	>260
Evaporation Rate:	N/A	**Auto-Ignition Temperature, °C**	>260
Vapor Density:	Heavier than air	**Vapor Pressure, mmHg:**	Not Applicable

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

REACTIVITY: Stable under normal conditions.

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Avoid temperatures above 260 °C. Dust formation. Dust may form explosive mixture in air. Heat, flames and sparks.

INCOMPATIBILITY: None known based on information supplied.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides. Nitrogen oxides.

11. Toxicological Information

Practical Experiences

MOST IMPORTANT SYMPTOMS AND EFFECTS: None under normal processing.

EFFECT OF OVEREXPOSURE - INHALATION: Inhalation of dust in high concentration may cause irritation of respiratory system. In molten state, the material does not give off fumes that are toxic or injurious to persons or property. However, 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.

EFFECT OF OVEREXPOSURE - INGESTION: Ingestion may cause irritation to mucous membranes.

EFFECT OF OVEREXPOSURE - SKIN CONTACT: Direct skin contact may cause irritation. The molten product can cause serious burns.

EFFECT OF OVEREXPOSURE - EYE CONTACT: Direct eye contact may cause irritation. The molten product can cause serious burns.

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. Inhalation exposure to respirable levels of crystalline silica may cause respiratory impairment and lung damage. This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen.

CARCINOGENICITY: This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Inhalation, Skin Contact

Acute Toxicity Values
The acute effects of this product have not been tested. Data on individual components are tabulated below

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
1317-65-3	Calcium Carbonate	> 2000 mg/kg	> 2000 mg/kg	>20001 ppm (Gas/Mist)
65997-17-3	Glass Oxide; Glass	>2000 mg/kg	> 2000 mg/kg	>20001 ppm (Gas/Mist)
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	N.I.	>20001 ppm (Gas/Mist)
14808-60-7	Crystalline Silica, Quartz	>2000 mg/kg	> 2000 mg/kg	>20001 ppm (Gas/Mist)

N.I. = No Information

12. Ecological Information

ECOLOGICAL INFORMATION: The environmental impact of this product has not been fully investigated. Do not contaminate ponds, waterways or ditches with this material.

PRESISTENCE AND DEGRADABILITY: No Information

BIOACCUMULATIVE POTENTIAL: No Information

MOBILITY: No Information

OTHER ADVERSE ECOLOGICAL EFFECTS: No Information

13. Disposal Information

Product

DISPOSAL METHOD: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Dispose of contents/ container in accordance with the local/regional/national/international regulations.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Ensure adequate ventilation. Take up mechanically. Keep in suitable and closed containers for disposal. Avoid dust formation. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

CONTAMINATED PACKAGING: Dispose of contents/ container in accordance with the local/regional/national/international regulations.

14. Transport Information

SPECIAL TRANSPORT PRECAUTIONS: When in use, this product is elevated temperature liquid, n.o.s. (compound pavement marking), UN3257, Hazard Class 9, Packing Group III.

Road Transport

UN Number:	Not Regulated
Shipping Name:	Not Regulated
Transport Hazard Class:	Not Regulated
Packing Group:	Not Applicable
ERG No:	Not Regulated

Sea Transport

UN Number:	Not Regulated
Shipping Name:	Not Regulated
IMDG Class:	Not Regulated
Packing Group:	Not Applicable
EmS-No:	Not Regulated
Marine Pollutant:	Not A Marine Pollutant

Air Transport

UN Number:	Not Regulated
Shipping Name:	Not Regulated
IATA Class:	Not Regulated
Packing Group:	Not Applicable

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Carcinogenicity

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA components exist in this product.

U.S. State Regulations:

NEW JERSEY RIGHT-TO-KNOW:

The following materials are hazardous or among the top five components in this product.

Chemical Name	CAS-No.
Calcium Carbonate	1317-65-3
Glass Oxide; Glass	65997-17-3
Titanium Dioxide	13463-67-7
Rosin, Maleated, Polymer With Glycerol	68038-41-5
Crystalline Silica, Quartz	14808-60-7

PENNSYLVANIA RIGHT-TO-KNOW

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS-No.
Calcium Carbonate	1317-65-3
Glass Oxide; Glass	65997-17-3
Titanium Dioxide	13463-67-7
Rosin, Maleated, Polymer With Glycerol	68038-41-5
Petroleum Hydrocarbon Resin	64742-16-1
Crystalline Silica, Quartz	14808-60-7

CALIFORNIA PROPOSITION 65 CARCINOGENS

WARNING

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

Chemical Name	CAS-No.
Titanium Dioxide	13463-67-7
Crystalline Silica, Quartz	14808-60-7

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

WARNING

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

No Proposition 65 Reproductive Toxins exist in this product.

International Regulations: As follows -

CANADIAN WHMIS:

This SDS has been prepared in compliance with Controlled Product Regulations.

16. Other Information

Revision Date: 2/23/2021 **Supersedes Date:** 2/2/2021

Datasheet produced by: Regulatory Department

HMIS Ratings:

Health:	3	**Flammability:**	1	**Reactivity:**	0	**Personal Protection:**	X

NFPA Ratings:

Health:	1	**Flammability:**	1	**Reactivity:**	0	**Hazards:**	N.I.

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product where instructions and recommendations are not followed. Any use of the product not in conformance with this SDS or in combination with any other product or process is the responsibility of the user.

Safety Data Sheet

Section 1. Identification

Product Code:	884069
Product Name:	TM NYC YEL ALK EXT
Product Type:	Thermoplastic
Recommended Use:	Traffic Markings
Supplied by:	Ennis-Flint, Inc. 4161 Piedmont Parkway, Suite 370 Greensboro, NC 27410 T: 800.331.8118
Emergency Telephone:	Chemtrec 1-800-424-9300

2. Hazards Identification

EMERGENCY OVERVIEW: This product contains a component suspected of causing cancer. However, it is in a non-respirable form and inhalation is unlikely to occur from exposure. This classification is relevant when exposed to dust or powder form only (e.g. sanding, grinding).

GHS Classification
Carc. 2

Symbol(s) of Product

Signal Word
Warning

GHS HAZARD STATEMENTS

Carcinogenicity, category 2	H351	Suspected of causing cancer.

GHS PRECAUTIONARY STATEMENTS

P201	Obtain special instructions before use.
P281	Use personal protective equipment as required.
P308+P313	IF exposed or concerned: Get medical advice/attention.

3. Composition/Information on Ingredients

Chemical Name	CAS-No.	Wt. %	GHS Symbols	GHS Statements
Calcium Carbonate	1317-65-3	25-50	No Information	No Information
Glass Oxide; Glass	65997-17-3	25-50	No Information	No Information
Titanium Dioxide	13463-67-7	1.0-2.5	No Information	No Information
Crystalline Silica, Quartz	14808-60-7	0.1-1.0	GHS08	H351

4. First-aid Measures

FIRST AID - GENERAL ADVICE: Consult a physician if symptoms persist.

FIRST AID - INHALATION: Move to fresh air.

FIRST AID - INGESTION: Do NOT induce vomiting. If conscious, rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.

FIRST AID - SKIN CONTACT: In case of BURNS, remove patient from heat source. Immediately cool affected skin for as long as possible with cold water. Remove smoldering clothing, including shoes, boots and jewelry unless adhering to skin. Do not remove clothing if adhering to skin. Do not attempt to remove the molten thermoplastic from the skin. Removal could result in severe tissue damage. Cover patient with dry clean sheet. Conduct primary survey. If indicated, transport patient to emergency treatment facility. Wash affected area immediately with soap and plenty of water. Remove contaminated clothing and launder before reuse. Consult a physician if symptoms persist.

FIRST AID - EYE CONTACT: Contact with molten materials requires immediate medical assistance. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician if symptoms persist.

MOST IMPORTANT SYMPTOMS AND EFFECTS: None under normal processing.

NOTES TO PHYSICIAN: None known based on information supplied.

5. Fire-fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: None expected.

SPECIAL FIREFIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

EXTINGUISHING MEDIA: Alcohol Foam, Carbon Dioxide, Dry Chemical, Water Fog

6. Accidental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Ensure adequate ventilation. Take up mechanically. Keep in suitable and closed containers for disposal. Avoid dust formation. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Allow molten material to cool. Then dispose of according to federal and state regulations.

ENVIRONMENTAL PRECAUTIONS: Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

EMERGENCY ADVICE: Under normal usage or contained spills, this material should not pose a significant emergency risk.

PERSONAL PRECAUTIONS: Use personal protective equipment.

7. Handling and Storage

HANDLING: Ensure adequate ventilation. Avoid breathing vapor, mists or dust. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Observe good industrial hygiene practices. 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 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 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 in a dry and well-ventilated place. Keep in properly labeled containers.

8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

Chemical Name	ACGIH TLV-TWA	ACGIH-TLV STEL	OSHA PEL-TWA	OSHA PEL-CEILING
Calcium Carbonate	N.E.	N.E.	15 mg/m3	N.E.
Glass Oxide; Glass	N.E.	N.E.	N.E.	N.E.
Titanium Dioxide	10 mg/m3	N.E.	15 mg/m3	N.E.
Crystalline Silica, Quartz	0.025 mg/m3	N.E.	0.05 mg/m3	N.E.

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation Sk = Skin Sensitizer N.E. = Not Established

Personal Protection

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.

SKIN PROTECTION: Protective gloves/clothing. Use of long sleeved shirts is required when handling molten material.

EYE PROTECTION: Safety glasses with side-shields. Use of a faceshield is recommended when handling molten material.

OTHER PROTECTIVE EQUIPMENT: Eyewash stations, safety showers, ventilation systems.

HYGIENIC PRACTICES: When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

ENGINEERING CONTROLS: Use in a well ventilated area.

9. Physical and Chemical Properties

Appearance:	Yellow	**Physical State:**	Solid
Odor:	Odorless	**Odor Threshold:**	Not Established
Density, g/cm3:	2.007	**pH:**	Not Applicable
Freeze Point, °C:	Not Applicable	**Viscosity:**	No Information
Solubility in Water:	Insoluble	**Partition Coefficient, n-octanol/ water:**	Not Applicable
Decomposition temperature, °C	Not Applicable		
Boiling Range, °C:	Not Determined	**Explosive Limits, %:**	Not Determined
Combustibility:	Does not Support Combustion	**Flash Point, °C:**	>260
Evaporation Rate:	N/A	**Auto-Ignition Temperature, °C**	>260
Vapor Density:	Heavier than air	**Vapor Pressure, mmHg:**	Not Applicable

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

REACTIVITY: Stable under normal conditions.

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Avoid temperatures above 260 °C. Dust formation. Dust may form explosive mixture in air. Heat, flames and sparks.

INCOMPATIBILITY: None known based on information supplied.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides. Nitrogen oxides.

11. Toxicological Information

Practical Experiences

MOST IMPORTANT SYMPTOMS AND EFFECTS: None under normal processing.

EFFECT OF OVEREXPOSURE - INHALATION: Inhalation of dust in high concentration may cause irritation of respiratory system. In molten state, the material does not give off fumes that are toxic or injurious to persons or property. However, 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.

EFFECT OF OVEREXPOSURE - INGESTION: Ingestion may cause irritation to mucous membranes.

EFFECT OF OVEREXPOSURE - SKIN CONTACT: Direct skin contact may cause irritation. The molten product can cause serious burns.

EFFECT OF OVEREXPOSURE - EYE CONTACT: Direct eye contact may cause irritation. The molten product can cause serious burns.

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. Inhalation exposure to respirable levels of crystalline silica may cause respiratory impairment and lung damage. This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen.

CARCINOGENICITY: This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B).

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Inhalation, Skin Contact

Acute Toxicity Values
The acute effects of this product have not been tested. Data on individual components are tabulated below

CAS-No.	Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
1317-65-3	Calcium Carbonate	> 2000 mg/kg	> 2000 mg/kg	>20001 ppm (Gas/Mist)
65997-17-3	Glass Oxide; Glass	>2000 mg/kg	> 2000 mg/kg	>20001 ppm (Gas/Mist)
13463-67-7	Titanium Dioxide	>10000 mg/kg Rat	N.I.	>20001 ppm (Gas/Mist)
14808-60-7	Crystalline Silica, Quartz	>2000 mg/kg	> 2000 mg/kg	>20001 ppm (Gas/Mist)

N.I. = No Information

12. Ecological Information

ECOLOGICAL INFORMATION: The environmental impact of this product has not been fully investigated. Do not contaminate ponds, waterways or ditches with this material.

PRESISTENCE AND DEGRADABILITY: No Information

BIOACCUMULATIVE POTENTIAL: No Information

MOBILITY: No Information

OTHER ADVERSE ECOLOGICAL EFFECTS: No Information

13. Disposal Information

Product

DISPOSAL METHOD: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Dispose of contents/ container in accordance with the local/regional/national/international regulations.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Ensure adequate ventilation. Take up mechanically. Keep in suitable and closed containers for disposal. Avoid dust formation. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry.

CONTAMINATED PACKAGING: Dispose of contents/ container in accordance with the local/regional/national/international regulations.

14. Transport Information

SPECIAL TRANSPORT PRECAUTIONS: When in use, this product is elevated temperature liquid, n.o.s. (compound pavement marking), UN3257, Hazard Class 9, Packing Group III.

Road Transport

UN Number:	Not Regulated
Shipping Name:	Not Regulated
Transport Hazard Class:	Not Regulated
Packing Group:	Not Applicable
ERG No:	Not Regulated

Sea Transport

UN Number:	Not Regulated
Shipping Name:	Not Regulated
IMDG Class:	Not Regulated
Packing Group:	Not Applicable
EmS-No:	Not Regulated
Marine Pollutant:	Not A Marine Pollutant

Air Transport

UN Number:	Not Regulated
Shipping Name:	Not Regulated
IATA Class:	Not Regulated
Packing Group:	Not Applicable

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Carcinogenicity

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA components exist in this product.

U.S. State Regulations:

NEW JERSEY RIGHT-TO-KNOW:

The following materials are hazardous or among the top five components in this product.

Chemical Name	CAS-No.
Calcium Carbonate	1317-65-3
Glass Oxide; Glass	65997-17-3
Rosin, Maleated, Polymer With Glycerol	68038-41-5
Petroleum Hydrocarbon Resin	64742-16-1
Titanium Dioxide	13463-67-7
Crystalline Silica, Quartz	14808-60-7

PENNSYLVANIA RIGHT-TO-KNOW

The following non-hazardous ingredients are present in the product at greater than 3%.

Chemical Name	CAS-No.
Calcium Carbonate	1317-65-3
Glass Oxide; Glass	65997-17-3
Rosin, Maleated, Polymer With Glycerol	68038-41-5
Petroleum Hydrocarbon Resin	64742-16-1
Titanium Dioxide	13463-67-7
Crystalline Silica, Quartz	14808-60-7

CALIFORNIA PROPOSITION 65 CARCINOGENS

WARNING

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

Chemical Name	CAS-No.
Titanium Dioxide	13463-67-7
Crystalline Silica, Quartz	14808-60-7

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

WARNING

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

No Proposition 65 Reproductive Toxins exist in this product.

International Regulations: As follows -

CANADIAN WHMIS:

This SDS has been prepared in compliance with Controlled Product Regulations.

16. Other Information

Revision Date: 2/23/2021 **Supersedes Date:** 2/2/2021

Datasheet produced by: Regulatory Department

HMIS Ratings:

Health:	3	**Flammability:**	1	**Reactivity:**	0	**Personal Protection:**	X

NFPA Ratings:

Health:	1	**Flammability:**	1	**Reactivity:**	0	**Hazards:**	N.I.

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product where instructions and recommendations are not followed. Any use of the product not in conformance with this SDS or in combination with any other product or process is the responsibility of the user.

HIGHWAY

STANDARD & PREMIUM SAFETY MARKING SPHERES

Durable, versatile and highly reflective... in all marking systems

STANDARD

Potters Standard Highway Spheres—Cost-effective Highway Delineation

- Retroreflective pavement markings deliver continuous roadway guidance to drivers and have been proven to increase highway safety.
- Our Standard Highway Marking Spheres provide cost-effective nighttime roadway delineation, and can meet any specific standard glass bead specification in North America.
- Our Standard spheres are consistent in quality and composition. Strict quality control produces spheres that optimize retroreflectivity. Proprietary coatings are available to resist agglomeration, ensure flotation for ideal embedment and improve adhesion for greater durability.
- Standard spheres may be applied as a drop-on in all commercial binders, including waterborne paint, epoxy, polyester, thermoplastic, PMMA and polyurea.
- Our beads meet the rigorous heavy metals limitations set forth by state and federal standards.

Standard Spheres: Facts and Figures

- **Size:** 20–80 mesh (850–150 microns); a range of sizes offsets effects of traffic/binder degradation.
- **Compatible binders:** waterborne or solvent-based paint, epoxy, polyester, thermoplastic, PMMA, polyurea
- **Standards:** Spheres can be supplied to meet state specifications for gradation (size), roundness and coatings. Potters Industries is able to supply glass beads which meet any specific standard glass bead specification in North America.

Potters Industries Inc.
an affiliate of PQ Corporation

Potters respects the environment by recycling over one billion pounds of glass each year.

Typical Standard Bead Size

U.S. Mesh Size	Millimeters	Mass % Passing
16	1.18	100
20	0.850	95-100
30	0.600	75–95
50	0.300	15–35
100	0.150	0–5

AASHTO M-247, Type 1, Roundness—70%, 75%, and 80% overall by sieve size.

Potters retroreflective pavement markings deliver continuous roadway guidance to drivers and have been proven to increase highway safety.

See Your Potters Representative or Call (800) 55-BEADS
Visit Us On The Web at www.pottersbeads.com

VISIBEAD® Is Clearly Superior For Adverse Weather Conditions

- VISIBEAD Highway Safety Marking Spheres enhance drivers' nighttime visibility, particularly in rain, fog or melting snow, for dramatic improvements in mobility and highway safety.
- Because VISIBEAD spheres are three to four times larger than conventional glass beads, they stand higher above the surface of the line than conventional beads, delineating highway markings clearly and providing superior wet night visibility.
- Potters Industries manufactures VISIBEAD spheres using proprietary technology to ensure consistent quality, improved durability and unique clarity. Specialized coatings enable VISIBEAD spheres to combine chemically with the binder, improving adhesion, optimizing embedment and maximizing long-term retroreflectivity.
- Potters Industries' VISIGUN® safety marking sphere dispenser is designed for optimal application of VISIBEAD spheres.
- VISIBEAD Spheres are easy to apply with existing equipment.
- Our beads meet and exceed the rigorous heavy metals limitation standards set forth by state and federal standards.

VISIBEAD Facts and Figures

- **Size:** 14–20 mesh (1.4–0.85 mm); a range of sizes offsets the effects of traffic and binder degradation.
- **Compatible binders:** waterborne or solvent-based paint, epoxy, polyester, thermoplastic, PMMA and polyurea.
- **Standards:** Most states specify gradation (size), roundness and coating requirements for highway marking beads. VISIBEAD spheres meet the U.S. Department of Transportation Federal Highway Administration's FP-03 specifications.

VISIBEAD Spheres use proprietary technology to ensure consistent quality, improved durability and unique clarity.

VISIBEAD Spheres are three to four times larger than conventional glass beads, and stand higher above the surface of the line, delineating highway markings clearly and providing superior visibility.

Potters Industries Inc.
an affiliate of PQ Corporation

Potters respects the environment by recycling over one billion pounds of glass each year.

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SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name	**Highway Safety Marking Spheres with Coating** **Standard Highway Safety Marking Spheres with Coating** **Premium Highway Safety Marking Spheres with Coating** **VISIBEAD® Highway Safety Marking Spheres with Coating** **VISIBEAD® Plus II Highway Safety Marking Spheres with Coating** **Premix Highway Safety Marking**
CAS No.	65997-17-3
EINECS No.	2660460

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified use(s)	Road safety markings

1.3 Details of the supplier of the safety data sheet

Company Identification	Potters Industries LLC P. O. Box 841 Valley Forge, PA 19482 USA
Telephone	+1 610-651-4700
E-Mail (competent person)	sds.uk@pqcorp.com

1.4 Emergency telephone number

Emergency Phone No.	Potters Industries LLC +1 610-651-4200 ChemTrec (800) 424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification	Not classified as dangerous for supply/use.
EC Classification	Not classified as dangerous for supply/use.
Hazards summary	Dust may cause irritation. Spilled material is slippery .

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	%W/W	CAS No.	EINECS No. / REACH Registration	EC Classification and Risk Phrases
Glass oxide; Glass	>99	65997-17-3	2660460	Not applicable.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Eye Contact	Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. If symptoms persist, obtain medical attention.
Skin Contact	Wash affected skin with plenty of water. If symptoms occur obtain medical attention.
Inhalation	In case of accident by inhalation: remove casually to fresh air and keep at rest. If symptoms develop, obtain medical attention.

Ingestion	Do not induce vomiting. If symptoms develop, obtain medical attention.
4.2 Most important symptoms and effects, both acute and delayed	Dust may cause irritation. Spilled material is slippery . Dust may cause discomfort and mild irritation.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media	
Suitable Extinguishing Media	As appropriate for surrounding fire.
Unsuitable extinguishing Media	None known.
5.2 Special hazards arising from the substance or mixture	Spilled material can make floors slippery.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures	Wear suitable protective clothing. Wear eye/face protection.
6.2 Environmental precautions	Not applicable.
6.3 Methods and materials for containment and cleaning up	Caution - spillages may be slippery. Avoid generation of dust. Sweep or preferably vacuum up and collect in suitable containers for recovery or disposal.
6.4 Reference to other sections	Not applicable.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling	Avoid contact with eyes, skin and clothing. Avoid generation of dust. Wash thoroughly after handling. Wear protective equipment to comply with good occupational hygiene practice. Do not eat, drink or smoke at the work place.
7.2 Conditions for safe storage, including any incompatibilities	Keep container tightly closed and dry.
7.3 Specific end use(s)	Not applicable.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

SUBSTANCE.	Occupational Exposure Limits
Glass oxide; Glass	No Occupational Exposure Limit assigned. 15mg/m3 total dust 5mg/m3 respirable (Particulates Not Otherwise Regulated)

8.2 Exposure controls	
8.2.1 Appropriate engineering controls	Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.
8.2.2 Personal Protection	
Respiratory protection	Wear suitable respiratory protective equipment if working in confined spaces with inadequate ventilation or where there is any risk of the exposure limits being exceeded.
Eye/face protection	Safety spectacles
Skin protection	Wear suitable protective clothing and gloves. For example cotton or rubber .

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Glass Powder . White.
Odour	Odourless.
Odour Threshold (ppm)	Not applicable.
pH (Value)	Not applicable.
Freezing Point (°C)	Not applicable.
Melting Point (°C)	Approx 730 C
Boiling Point (°C)	Not applicable.
Flash Point (°C) [Closed cup]	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non-combustible.
Vapour Pressure (mm Hg)	Not applicable.
Vapour Density (Air=1)	Not applicable.
Solubility (Water)	Insoluble.
Partition Coefficient	Not applicable.
Auto Ignition Point (°C)	Not applicable.
Decomposition Temperature (°C)	Not applicable.
Viscosity (mPa. s)	Not applicable.
Explosive properties	Not applicable.
Oxidising Properties	Not applicable.
9.2 Other Information	Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Avoid contact with strong acids
10.2 Chemical stability	Stable.
10.3 Possibility of hazardous reactions	Not applicable.
10.4 Conditions to avoid	Not applicable.
10.5 Incompatible materials	None known.
10.6 Hazardous decomposition product(s)	None known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Ingestion	The acute oral toxicity of this product has not been tested. A similar material was nontoxic to rats at 5,000 mg/kg.
Inhalation	No data. May cause irritation to the respiratory system.
Skin Contact	Dust may cause mechanical irritation.
Eye Contact	Dust may cause mechanical irritation.
Sensitisation	Not sensitising.
Carcinogenicity	There are no known reports of carcinogenicity of nonfibrous glass.
Reproductive toxicity	No evidence of reproductive effects.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	No environmental hazards have been reported or known.
12.2 Persistence and degradability	This material is persistent but inert in aquatic systems. It will not bioconcentrate up the food chain.
12.5 Results of PBT and vPvB assessment	Not classified as PBT or vPvB.

12.6 Other adverse effects — Not applicable

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods — The waste is considered to be non hazardous. Disposal should be in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION

14.2 Proper Shipping Name — NOT CLASSED AS DANGEROUS FOR TRANSPORT.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

TSCA Inventory Status: Reported/Included.
AICS Inventory Status: Reported/Included.
DSL/NDSL Inventory Status: Reported/Included.
WHMIS Classification Not classified.
German Water Hazard Classification VwVwS: WGK class 1 (low hazard to water).
HMIS: 0,0,0

SECTION 16: OTHER INFORMATION

This SDS was last reviewed: 08/2014
The following sections contain revisions or new statements: All sections.

EC Classification No. 67/548/EEC	Not classified as dangerous for supply/use.
GHS Classification	Not classified as dangerous for supply/use.

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