



CROWN
TECHNOLOGY, LLC
Thermoplastic Pavement Markings

TuffLine® PLUS
White Alkyd Thermoplastic

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION

Product Name: TuffLine® PLUS White Alkyd Thermoplastic

Manufacturer: Crown Technology, LLC
35 Industrial Park Drive
Woodbury, GA 30293

Emergency Phone Number: (706) 553-9500

Issue Date: 06/12/2017

Product Use: Thermoplastic Pavement Marking Material

SECTION 2 – HAZARDS IDENTIFICATION

GHS Classification Skin Irritation, Category 3
Eye Irritation, Category 2B
Skin Sensitization, Category 1
Respiratory Sensitization, Category 1

GHS Labeling

Signal Word

Danger

Pictograms



Hazard Statements

Causes mild skin irritation
Causes eye irritation
May cause an allergic skin reaction
May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary Statements

Wash hands thoroughly after handling.
Avoid breathing dust and fumes.
Wear NIOSHA/MSHA approved respiratory protection (organic vapor/dust filtering respirator is recommended), face shields,

heat resistant gloves, long sleeve shirts, long pants, socks, hard soled shoes, and hats.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical attention.

IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical attention.

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

Contaminated clothing should not be allowed out of the workplace.

Wash contaminated clothing before reuse.

Disposal should be made in accordance with Federal, State, and Local regulations.

Packaged/Powdered Form –

| | |
|-------------------------------|--|
| Physical Form/Appearance: | White Powdered/Granular Material |
| Primary Routes of Absorption: | Eyes - Dermal - Inhalation – Ingestion |
| Eye and Dermal Irritation: | As Nuisance Dust |
| Inhalation: | Overexposure may be irritating to the respiratory track. |

Molten/Hot Form –

| | |
|-------------------------------|--|
| Primary Routes of Absorption: | Eyes, Dermal and Inhalation |
| Eye and Inhalation: | Overexposure to hot fumes of molten thermoplastic may cause irritation to the eyes and respiratory tract. As always, care should be taken not to breathe hot fumes of any type. If such inhalation occurs, remove to a well ventilated area. |
| Skin: | Heated thermoplastic can cause serious burns to unprotected skin. |

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

| <u>Ingredient:</u> | <u>CAS No.</u> | <u>% Wt</u> |
|-----------------------------|-----------------------|--------------------|
| Alkyd Resin | 68333-62-0 | 0 - 27 |
| Maleic Modified Rosin Ester | 8050-26-8 | 0 - 27 |
| Calcium Carbonate | 471-34-1 | 20 - 60 |
| Titanium Dioxide | 13463-67-7 | 6 - 14 |
| Glass Oxide | 65997-17-3 | 20 - 45 |

SECTION 4 – FIRST AID MEASURES

Packaged/Powdered Form –

Contact by:

- Skin:** Wash with soap and water.
- Eye:** Wash eyes with running water. See a physician if irritation persists.
- Inhalation:** Remove to fresh air and call a physician.
- Ingestion:** Not anticipated. However, if large amounts are ingested, drink plenty of water and call a physician or Poison Control Center immediately.

Molten/Hot Form –

Contact by:

- Skin:** Cool immediately under running water. Do not apply ice as this may cause frost bite. Continue to cool under running water for an extended period of time. Do not attempt to remove the plastic as, in most cases, the skin is also removed, resulting in severe tissue damage. Immediately call a physician and receive medical attention.
- Eye:** Flush with running water. Call a physician
- Inhalation of Fumes:** Remove to well ventilated area. Call a physician if irritation persists.

SECTION 5 – FIRE FIGHTING MEASURES

- Flash Point:** 475°F COC
- Extinguishing Media:** Dry Chemical, CO₂, Foam
- Special Fire Fighting Procedures:** Toxic emissions may be released in a fire. Wear self-contained breathing apparatus
- Unusual Fire and Explosion Hazards:** None
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SECTION 6 – ACCIDENTAL RELEASE MEASURES

STEPS TO TAKE WHEN MATERIAL IS SPILLED:

Uncontaminated material may be reclaimed for use. If material is contaminated, place material in appropriate receptacle for disposal. Report the spill, if deemed necessary, according to local laws and regulations. Disposal of contaminated material should be done in accordance with Federal, State and Local regulations.

SECTION 7 – HANDLING AND STORAGE

Handling:

During normal application local exhaust should be provided in unventilated work areas. Do not eat, drink, or smoke when using product. Precautions should be taken to prevent water damage by using the appropriate coverings. When using/handling product, avoid creating/making dust and do not inhale or ingest dust. Wash thoroughly before eating, drinking, or smoking after using/handling material. Keep away from open flames. Do not heat material above 450°F. Keeping water nearby during application is always recommended.

Storage:

Always store material in a cool dry place. If stored outside, always cover material to prevent damage which may be caused by moisture.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Application Precautions –

Ventilation:

Provide adequate local exhaust ventilation to reduce exposure to dust and fumes to maintain concentrations below acceptable exposure limits (see below). Ventilation for the application equipment must be provided to prevent excessive pressure and concentration of fumes which could lead to material flashing at low temperatures.

Personal Protective Equipment (PPE) –

Eyes:

Goggles, face shield

Skin:

Heat resistant gloves and clothing to help prevent injury from molten material. This includes long sleeve shirt, long pants, socks, hard sole shoes, and hat.

Respiratory:

NIOSH/MSHA approved respirator as necessary. An organic vapor/dust-filtering respirator is recommended. The exact selection of a respirator should be based on the concentration

of air contaminate present while using the below exposure limit guidelines (PEL).

| <u>Ingredient:</u> | <u>OSHA PEL</u> | <u>ACGIH TLV</u> |
|-----------------------------|--|--|
| Maleic Modified Rosin Ester | 15 mg/m ³ | 10 mg/m ³ |
| Calcium Carbonate | 15 mg/m ³ (Total Dust) | 10 mg/m ³ (Total Dust) |
| | 15 mg/m ³ (Respirable Dust) | 10 mg/m ³ (Respirable Dust) |
| Titanium Dioxide | 15 mg/m ³ (TWA) | 10 mg/m ³ (TWA) |
| Glass Oxide | 15 mg/m ³ (Total Dust) | - |

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

| | |
|--------------------------------|---|
| Physical Appearance: | White granular powder |
| Boiling Point: | Not applicable |
| Melting Point: | 100°C (Ring & Ball Softening Point) |
| Specific Gravity: | 50-75 lbs/ft ³ (dry granular form) |
| Vapor Pressure (mm Hg): | Not applicable |
| VOC (%): | Negligible |
| Evaporation Rate: | Not applicable |
| Vapor Density: | Not applicable |
| Solubility in Water: | Not applicable |
| Percent Volatile: | Not applicable |
| Flash Point: | >= 475°F (COC) |

SECTION 10 – STABILITY AND REACTIVITY

| | |
|---|--|
| Stability: | Stable |
| Hazardous Polymerization: | None |
| Conditions and Materials to Avoid: | Avoid temperatures above 450°F and strong oxidizing agents |
| Hazardous Decomposition Products: | CO, CO ₂ and, aliphatic aldehydes. |

SECTION 11 – TOXICOLOGICAL INFORMATION

See section 15 – Regulatory Information

SECTION 12 – ECOLOGICAL INFORMATION

Not known

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal Method: Disposal should be made in accordance with Federal, State, and Local regulations. See section 15 – Regulatory Information

SECTION 14 – TRANSPORT INFORMATION

See section 15 – Regulatory Information

SECTION 15 – REGULATORY INFORMATION

Department of Transportation: Non Regulated

Toxic Substance Control Act: All components of thermoplastic traffic markings are listed in the TSCA Inventory of Chemical Substances.

SARA TITLE III: This product does not contain chemicals subject to reporting requirements of SARA Title III, Section 313 and of 40CFR372.

RCRA Statement: This material is defined as non-hazardous when tested under 40 CFR 261 (see Table 1 of 40 CFR 261.24).

SECTION 16 – OTHER INFORMATION

NFPA Health: 1 Flammability: 1 Reactivity: 0 Special Hazards: None

HMIS Health: 1 Flammability: 1 Physical Hazard: 0 Personal Protective Equipment: X

The information provided is in compliance with the Federal Hazard Communication standard 29CFR1910.1200, to give warning of actual and assumed hazards, and to inform of generally applicable precautions and control measures which are known to Crown Technology, LLC. Hazard information is based on available scientific evidence, but is not always obtained from sources under the direction or control of Crown Technology, LLC. Crown Technology, LLC makes no warranty or representation that the information is accurate, reliable, complete or representative and Buyer may rely thereon only at Buyer's own risk. Crown Technology, LLC warrants only that it has made no effort to censor, other than trade secret information or to conceal hazards of its products. The data shown on these pages in no way modifies, amends or enlarges any specification or warranty.

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