



TAMPA ELECTRIC

February 5, 2001

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BUREAU OF AIR REGULATION

Mr. Scott Sheplak, P.E.
Florida Department of Environmental Protection
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Via FedEx
Airbill No. 7904 6445 5831

**Re: Tampa Electric Company
Big Bend Station
FDEP Files No. 0570039-002-AV
Notification of Use of Coal Treated with Binder
Additional Information/ PE Certification**

Dear Mr. Sheplak:

Tampa Electric Company (TEC) previously notified the Department of the intended use of coal treated with a latex binder (LATEX DL 298NA). This binder has not been used to date and is not expected to be used at all. A different binder (MTT-180) is now being considered for use. This binder is a mixture of two base products and water. The MSDS sheets for the two base products as well as a MSDS for the combined product are enclosed. In addition, a review of the binder's effect (or lack there of) related to environmental issues (signed and sealed by a Professional Engineer), is also enclosed.

TEC is requesting a written response from the Department confirming our ability to use coal treated with the above referenced binder. TEC intends to begin the use of this fuel on, or after March 1, 2001. Please contact me at (813) 641-5033, if you have any questions.

Sincerely,

Jamie Hunter
Consulting Engineer
Environmental Affairs

EP\gm\JH944

Enclosures

c/enc: Mr. Jonathan Holtom, FDEP – Tallahassee
Mr. Jerry Kissel, FDEP-SW District
Mr. Jerry Campbell, EPCHC

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Environmental Consulting & Technology, Inc.

February 1, 2001

Mr. Jamie Hunter
Consulting Engineer
Tampa Electric Company
6944 U.S. Highway 41 North
Apollo Beach, FL 33572-9200

**Re: Tampa Electric Company
Big Bend Station
FDEP File No. 0570039-002-AV
Use of Coal Treated with Binder**

Dear Mr. Hunter:

A professional engineer certification was previously provided to you regarding the environmental issues associated with the handling and combustion of coal treated with a latex binder. In response to your request, this letter provides a professional engineer certification for an additional binding material planned for use at the Big Bend Station. This binding material is manufactured by Midwest Terminals of Toledo, Inc. and is identified as MTT-180 Chemical Change Reagent. (MTT-180).

As with the prior binding material, the MTT-180 coal binder will serve to reduce fugitive particulate matter emissions during coal handling and storage. This certification addresses the collateral issues of: (a) potential emissions of volatile organic compound (VOC) emissions, (b) binder combustion emissions, and (c) potential surface runoff contamination. Each of these issues are discussed in the following sections:

A. Potential for VOC Emissions

The Material Safety Data Sheet (MSDS) for the MTT-180 material lists three ingredients: (a) RRR Compound No. R-563, (b) brix cane molasses, and (c) water.

The Rub-R-Road (RRR) Compound No. R-563 MSDS indicates that the material is a milky white liquid emulsion comprised of a styrene/butadiene polymer (from 63 to 65 percent by weight) and water (from 35 to 37 percent by weight), with trace amounts of residual styrene <0.04 weight percent) and butadiene (<0.001 weight percent). The physical and chemical properties section of the MSDS shows a boiling point of 100°C (212°F) for the polymer/water product. Pure water at 20°C has the same vapor pressure and boiling point. Accordingly, the polymer and trace residual monomer components of the Rub-R-Road Compound No. R-563 do not contribute to the volatility to the product.

The second ingredient of the MTT-180 binder is molasses. Molasses is a dark brown, high boiling point viscous liquid obtained as a by-product of cane sugar processing. Molasses contains uncrystallized sugar and some sucrose. The third component of the MTT-180 binder is water.

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98th Street
Gainesville, FL
32606

(352)
332-0444

FAX (352)
332-6722

Mr. Jamie Hunter
February 1, 2001
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Based on the composition of the MTT-180 binder, VOC emissions due to evaporative losses from the binder will be negligible.

B. Coal Binder Combustion Emissions

The MTT-180 material is a liquid emulsion comprised of a polymerized hydrocarbon (i.e., styrene/butadiene polymer), molasses, and water. The high temperature combustion temperatures and combustion residence times occurring in the Big Bend coal-fired units would be expected to result in essentially complete combustion of the MTT-180 material to carbon dioxide (CO₂) and water (H₂O). The MTT-180 material also represents a very small portion of the total mass of coal fuel that is combusted in the Big Bend units.

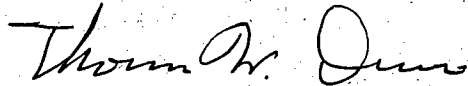
C. Potential Surface Runoff Contamination

Once applied, the majority of the MTT-180 material would be expected to remain with the coal and ultimately be oxidized in the Big Bend boilers. Surface runoff from the treated coal handling and storage areas would therefore be expected to have negligible amounts of the MTT-180 binder material.

Please contact me at (352) 332-6230, Ext. 351 if there are any questions regarding this certification.

Sincerely,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

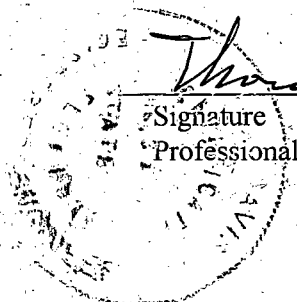



Thomas W. Davis, P.E.
Principal Engineer

Professional Engineer Statement:

I, the undersigned, hereby certify that:

To the best of my knowledge, the emission estimates reported in this certification are true, accurate, and complete based upon reasonable techniques available for estimating emissions.





Signature
Professional Engineer No. 36777

2/1/01
Date

Material Safety Data Sheet
 May be used to comply with
 OSHA's Hazard Communication Standard
 29 CFR 1900.1200. Standard must be
 consulted for specific requirements

U.S. Department of Labor
 Occupational Safety and Health Administration
 (Non-Mandatory Form)
 Form Approved
 OMB No. 1218-0072

IDENTITY (As Used on Label and List)
 MTT-180 Chemical Change Reagent

Section 1

Manufacturer's Name Midwest Terminals of Toledo Inc.	Emergency Telephone Number 740-352-8181
Address 3607 Hayport Road Wheelersburg, Ohio 45684	Telephone Number for Information 419-878-7304
	Date Prepared 10/5/2000
	Signature of Preparer (optional)

Section 2 - Identity Information

Hazardous Components	CAS Number	OSHA PEL	ACGIH TLV	Other Limits	% (optional)
RRR Compound No. R 583	9003-65-8		NA	None Known	
Brix Cane Molasses			NA	None Known	
Water	7732-18-5		NA	None Known	

Section 3 - Physical / Chemical Characteristics

Boiling Point			
Vapor Pressure(mm HG)	212F	Specific Gravity (H2O=1)	0.96-1.05
Vapor Density (Air =1)	N/A	Melting Point	N/A
Solubility in Water	completely N/A	Evaporation Rate (Butyl Acetate=1)	similar to water
Appearance and Odor Light brown liquid, minimal odor			

Section 4 - Fire and Explosion Hazard Data

Flash Point(Method Used)	
Not Applicable as an Emulsion	Flammable Limits
Extinguishing Media	LEL UEL
Water Spray or Foam	
Special Fire Fighting Procedure	
Do not enter confined fire area without full bunker gear and NIOSH approved, self-contained apparatus.	
Unusual Fire and Explosion Hazards	
Emulsion may foam if heated to 212F. If materials in excess of 212F are added to the emulsion, foaming can occur.	

Rubber Compounds
 For Better Paving
 Since 1957



PO Box 455 Kent, Ohio 44240

Material Safety Data Sheet

Issue Date: 6/1/00	Product: Rub-R-Road Compound No. R-563 Styrene/Butadiene Copolymer Dispersion
Emergency Phone No.: 880/424-9300	
Business Phone No.: 330/678-7050	

Section 1 - Material Identification and Information

Components	%	OSHA PEL TWA	ACGIH TLV TWA	CAS
Polymer	63-65%	NA	NA	9003-55-8
Water	37-35%	NA	NA	7732-18-5
Residual Styrene	<0.04	100 PPM	20 PPM	100-42-5
Residual Butadiene	<0.001	1 PPM	2 PPM	106-99-0

Section 2 - Physical/Chemical Characteristics

Boiling Point	Approx. 100 °C	Specific Gravity (H ₂ O = 1)	Approx. 0.94
Vapor Pressure (mmHg and Temperature)	NA	Melting Point	NA
Vapor Density (Air = 1)	NA	Evaporation Rate	NA
Solubility in Water	Miscible	Water Reactive	No
Appearance or odor	Milky white liquid with possible slight styrene odor	pH	5

Section 3 - Fire and Explosion Hazard Data

Flash Point (Method)	>300° F (None specified)	Auto-Ignition Temperature:	NA
Flammability Limits in Air % by Volume	Residual monomer vapor	LEV: 1.1%	UEL: 11.5%
Extinguisher Media	Water spray, foam		
Special Fire Fighting Procedures	Breathing apparatus should be available for use by authorized personnel as dictated by circumstances.		
Unusual Fire and Explosion Hazards	The dried product will burn with emission of dense smoke. Combustion products will include toxic gases. High Temperatures may cause emission of volatile substances such as trace monomers, oxidation products, etc.		

Section 4 - Reactivity Hazard Data

Stability: Stable	Incompatibility (materials to avoid): Strong bases
Conditions to avoid:	Exposure to excessive heat or freezing. Spontaneous combustion may occur if dried product is exposed to excessive heat or sunlight.
Hazardous Decomposition Products:	Solids by combustion; oxides of carbon and nitrogen.
Hazardous Polymerization:	will not occur

Section 5 - Health Hazard Data

Primary Routes of Entry:	<input checked="" type="checkbox"/> Inhalation	<input checked="" type="checkbox"/> Skin Absorption	<input checked="" type="checkbox"/> Ingestion	Not Hazardous
Carcinogen Listed in:	NTP	IARC Monograph	OSHA	<input checked="" type="checkbox"/> Not Listed

This product contains one or more chemicals known to the State of California to cause cancer.

Health Hazards	Acute:	Overexposure to residual monomer vapors could result in upper respiratory irritation and central nervous system depression.
	Chronic:	Not considered to have carcinogenic potential under OSHA 29 CFR 190.1200

Signs and Symptoms of Exposure: Certain individuals may be susceptible to eye, skin and lung irritation.

Medical Conditions Generally Aggravated by Exposure: Unknown

Emergency First Aid Procedures: Seek medical assistance for further treatment, observation and support if necessary.

Eye contact: Flush with water thoroughly for 15 minutes. Seek medical attention. Acute effects could be delayed for several hours.

Skin Contact: Remove contaminated clothing and wash skin with soap and water.

Inhalation: Not hazardous under normal ambient conditions. If affected by fumes, remove to fresh air and obtain medical attention.

Ingestion: Drink plenty of water and seek medical attention. Immediately induce vomiting.

Section 6 - Control and Protective Measures

Respiratory Protection (Specify Type):	Use a NIOSH approved air purifying chemical cartridge respirator or an air supply respirator if residual monomer vapor concentration exceeds TLV.
Protective Gloves:	Impermeable gloves
Eye Protection:	Goggles or full face shield
Ventilation to be used:	Provide enough fresh air flowing past user to keep residual monomer vapors below TLB Listed in Section 1.
Other Protective Clothing and Equipment	Suitable clothing to prevent skin contact
Hygienic Work Practices	High standards should be maintained. Working areas should be well ventilated. Workers with a history of skin disease or allergy should receive medical clearance prior to employment.

Section 7 - Precautions for Safe Handling and Use/Leak Procedures

Steps to be taken if material is spilled or released	Contain spill with sand or earth. Scoop into containers or absorb using an inert material and shovel into suitable container. The polymer can be separated from the water content using brine and the coagulated solid shoveled into containers. Wash small spills away with water and approval of local waterway authority.
Waste Disposal Methods	Dispose of in approved landfill or incineration subject to local authority.
Precautions to be taken in handling and storage	Vapors may collect in top of container to form explosive condition. Keep vapors away from heat, sparks, open flame and other sources of ignition. Vapors may ignite explosively. Check atmosphere for oxygen content and toxic or explosive vapors before entering storage.
Other precautions and/or special hazards	Spilled latex is slippery. Care should be taken to prevent falls. Spontaneous combustion may occur if dried product is exposed to excessive heat or sunlight.
NFPH Rating	Health: 1 Flammability: 0 Reactivity: 0 Special: NA
HMS Rating	Health: 1 Flammability: 0 Reactivity: 0 Personal Protection: B

Westway Trading Corporation

MATERIAL SAFETY DATA SHEET MOLASSES/MOLASSES BLENDS

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chemical Name	Chemical Formula	Molecular Weight
NA	Mixture of liquid Agricultural commodities	No data

Trade Name - Molasses/Molasses Blends

Synonyms DOT Identification No.

Liquid animal supplement NA

Company Identification:

Westway Trading Corporation
365 Canal Street, Ste. 2900
New Orleans, Louisiana 70130
(504) 525-9741
(800) 654-9668

2. COMPOSITION, INFORMATION ON INGREDIENTS

Component(s), Chemical Name	CAS Registry No.	%(Approx.)	ACGIH TLV-TWA
Proprietary See ingredient tag	NA	No data	No data

3. HAZARDS IDENTIFICATION

Emergency Overview

This material should be stored in a vented tank designed to contain a material with a specific gravity of 1.3 or greater. Material can ferment if excessive moisture contamination is allowed. Fermentation can yield carbon dioxide with possible traces of ethanol or volatile fatty acids (e.g. acetic, propionic, lactic, or butyric) and if exposed to a spark or flame may result in an explosion. These conditions should be avoided. If maintenance of tank requires entry by personnel, OSHA's Confined Space standard (29CFR1910.146) shall be complied with. If welding is to be performed, the tank should be gas freed and only certified welders shall perform welding operations.

Potential Health Effects

Eyes - Mild irritant

Skin - None

Inhalation - Insufficient oxygen may be present in vessels containing the product due to the generation of carbon monoxide during fermentation

4. FIRST AID MEASURES

Eyes: Flush eyes for 15 minutes.

Skin: Wash with soap and water.

Ingestion: No data

5. FIRE FIGHTING MEASURES

Flashpoint (Method used)	Flammable Limits in Air
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Non-flammable	Non-flammable
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Non-combustible	Non-combustible
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Extinguishing Agents - NA

Unusual Fire and Explosion Hazards - Fermentation occurs when diluted with water and is accelerated by heat. During fermentation carbon monoxide with possible traces of ethanol or volatile fatty acids (e.g., acetic, propionic, lactic, or butyric) is given off, which produces inhalation hazards and possible explosion hazards.

6. ACCIDENTAL RELEASE MEASURES

Steps to be Taken in Case Material is Released or Spilled

Small spills - Stop the source of the spill. Recover as much product as possible for reuse. Absorb remaining spill and dispose solids in waste container.

Large spills - Stop the source of the spill. Create diversionary structures to minimize the extent of the release. Prevent the release from entering a waterway or sewer. Recover useable product. Absorb remaining spill and dispose of at an approved facility such as a municipal landfill or land application site.

7. HANDLING AND STORAGE

This material should be stored in a vented tank designed to contain a material with a specific gravity of 1.3 or greater. Material can ferment if excessive moisture contamination is allowed.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Respiratory Protection - None

Ventilation - Provide adequate ventilation to prevent accumulation of vapors.

Skin Protection - Rubber gloves

Eye Protection - Safety glasses

Hygiene - Wash any exposed area promptly with soap and water. Launder contaminated clothing.

Other Control Measures - None

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Odor
Dark brown syrupy liquid	Sweet
Physical State	Specific Gravity
Liquid	1.45
Boiling Point	Freezing/Melting Point
Very high	Varies
Vapor Pressure	% Volatile, by Volume
Low	No data
Evaporation Rate	Vapor Density in Air
No data	Water vapor only
Solubility in Water	pH
Soluble	2.25 to 6.0

10. STABILITY AND REACTIVITY

Chemical Stability - Stable

Conditions to Avoid - Excess moisture or heat. Unventilated containers.

Incompatibility with Other Materials -

Reacts with concentrated nitric acid or concentrated sulphuric acid. Ferments when diluted with water.

Hazard Decomposition Products - Carbon monoxide, alcohol or fatty acid vapors

Hazardous Polymerization - NA

11. ECOLOGICAL INFORMATION

Prevent releases to land or water. Results in high Biological Oxygen Demand (BOD) and potential oxygen depletion of aquatic systems.

12. DISPOSAL CONSIDERATIONS

Dispose of waste material at an approved municipal landfill or land application site.

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13. TRANSPORT INFORMATION

Hazardous Materials Description/ Proper Shipping Name - NA

DOT Hazard Class - NA

DOT Identification Number - NA

X This product is not a DOT hazardous material.

14. REGULATORY INFORMATION

Discharges to a water of the U.S. are regulated by the Environmental Protection Agency.

16. OTHER INFORMATION

None.

Date of Preparation: 3/15/96 REVISED: 7/7/99

Prepared by: Cindy V. Hughes, Executive VP, HSE