

Title of Training	Applying Heated Emulsified Asphalt
Equipment Info.	Marathon Hot Tack Sprayer
Material Needed	Operating Instructions

MARATHON HOT TACK SPRAYER

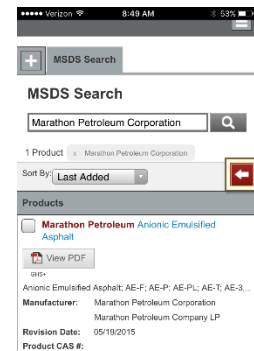
GENERAL

The hot tack sprayer is designed to spray a heated petroleum based product at increased pressure in order to seal coat asphalt based roadways and driveways. It is also used for sealing dyke walls designed for spill containment in certain areas (storage tanks in oil refineries). The product is loaded hot (up to 300 degrees F) into the holding tank and once it has been transported to the job site, the product can be heated to the desired temperature for application utilizing a diesel fuel fired burner. Product is then sprayed onto the targeted area using a hydraulically driven pressure system powered by a mounted gas motor to charge a hand wand or permanently mounted spray bar attached to the back of the unit. Special care must be used in all phases to ensure the safe operation and to prevent injury or damage to personnel and equipment. The procedures following will outline these steps required in order to operate the sprayer



PRODUCT

Emulsified Asphalt contains No. 2 fuel oil, an anionic emulsifier, and small amounts of sulfur, nitrogen, and oxygen containing compounds. The emulsifier liquefies the asphalt for application but allows the asphalt to convert back to its normal hardened state after a period of time. The SDS sheet should be available in written or electronic form and reviewed and kept available, physically or electronically, to refer to as needed.



TRANSPORTATION

The unit is mounted on a pull behind trailer on a single axle frame equipped with a ball hitch and trailer brakes.



Trainee Name (print)		Signature of Trainee	
Instructor Name		Date of Training	
Scan To:	Safety/Training/Equipment/Mar. Hot Tack Sprayer MM/DD/YYYY		
Revision # 001			Page 1 of 5

Title of Training	Applying Heated Emulsified Asphalt
Equipment Info.	Marathon Hot Tack Sprayer
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OPERATION

Refer to the manufacturer's Operating Instructions before using and during the entire process on how to load, heat, transport, apply and clean. Before use, make sure small tank used for storage of cleaning material is full as to facilitate immediate cleaning when job is complete.

This unit utilizes a diesel fired burner in order to heat the product to the desired temperature, the burner is to be turned off while transporting product form loadout to destination while on public roadways following posted speed limits. Inside facilities where the product will be loaded and used without leaving customer property, burners may be left on while moving at the slower speeds. Vehicle operators, however should use caution and shut off the burners as situations demand, such as emergency situations. **The vent must remain open the entire duration of time that there is product being heated.**



Always point the hand wand in a safe direction before starting and during use to avoid personal injury and property damage as a result of the pressure and heat of the product being sprayed. Try to avoid situations where the operator will be in areas that are conducive to back spray and low ventilation.



Trainee Name (print)		Signature of Trainee	
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Scan To:	Safety/Training/Equipment/Mar. Hot Tack Sprayer MM/DD/YYYY		
Revision # 001			Page 2 of 5

Title of Training	Applying Heated Emulsified Asphalt
Equipment Info.	Marathon Hot Tack Sprayer
Material Needed	Operating Instructions

HAZARDS TO BE AWARE OF

Hot Asphalt- Temperature of the product can be as high as 300 degrees Fahrenheit which in turn can cause hot surfaces, this is true for the holding tank and any line that comes in direct contact with the heated material.

Control- In addition to standard Brieser PPE, wear insulated gloves, such as welding gloves, while handling or touching hot surfaces. Wear a long sleeve shirt or coveralls to protect skin and a face shield to protect eyes and face.

Pressurized Liquid- In order to properly apply the material, a hydraulically driven system pressurizes the liquid. Remember that even when the wand or spray bar is not being used, the material is still under pressure as long as the pressurizing mechanism is still running.

Control- Always point the hand wand in a safe direction as to prevent injury or property damage. Inspect charged lines for leaks, make sure all fittings are tight and sealed. Keep others away using barricades or a standby.

Hydrogen Sulfide- H₂S is present in this material. Levels are generally low but still can be harmful. The vapors released from the heating of the asphalt emulsion have the potential of containing the higher concentrations and pose the biggest threat.

Control- Those working with the unit will need to know the hazards involved with working around H₂S, as outlined in Sect. 37 of the Brieser Safety Manual. Anyone working with or in close proximity to the unit while in operation will have an H₂S monitor. Avoid areas of low ventilation and be cognizant of wind direction. In situations where the levels of H₂S may become hazardous, Brieser safety will do an atmospheric test to determine if respiratory protection will be needed.



Vehicle/Trailer- Getting the material from the loadout to the job safely without vehicle or trailer malfunction or accident involving other drivers, pedestrians or property is of concern, especially transporting a liquid that is moving inside of the tank. The sloshing of the liquid while stopping, slowing or turning can give the

Trainee Name (print)		Signature of Trainee	
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Scan To:	Safety/Training/Equipment/Mar. Hot Tack Sprayer MM/DD/YYYY		
Revision # 001			Page 3 of 5

Title of Training	Applying Heated Emulsified Asphalt
Equipment Info.	Marathon Hot Tack Sprayer
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driver a false sense of security and impede judgement. The spilling of the material and contaminating untargeted areas is possible if leaks occur.

Control- The vehicle used to tow the trailer must be able to engage the trailer brakes. The driver must be eligible to drive per Brieser guidelines, have been trained on Section 16, Company Vehicle Policy, in the Brieser Safety Manual, and trained in **Trailers- Vehicle Towing Safety**. Vehicle and trailer must be inspected and the Brieser Inspection Report filled out and with the equipment. A 360 walk around of the vehicle and trailer before moving and the use of a spotter as needed while backing is to be employed. Inspect the tanks and lines for damage or for anything that may cause a leak.

MAINTENANCE, STORING & INSPECTIONS

Immediately clean the unit when finished using the cleaning solution as to prevent clogging of the system as the material hardens. Proper care should be taken to contain material that is flushed out as to prevent ground contamination. Product will still be at a raised temperature, still use the same caution during this process as you would at any other time around the heated material. After dropping off trailer, plug in the battery charger in order to keep the battery for the heater ignition at full potential. Inspections on the operating system and the trailer itself are to be performed before, during and after use according to the manufacturer's Operating Instructions and Brieser Inspection Report.

Trainee Name (print)		Signature of Trainee	
Instructor Name		Date of Training	
Scan To:	Safety/Training/Equipment/Mar. Hot Tack Sprayer MM/DD/YYYY		
Revision # 001			Page 4 of 5

Title of Training	Applying Heated Emulsified Asphalt
Equipment Info.	Marathon Hot Tack Sprayer
Material Needed	Operating Instructions

EMPLOYEE NAME Print or Type)	EMPLOYEE SIGNATURE	TRADE	JOB TITLE
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Trainee Name (print)		Signature of Trainee	
Instructor Name		Date of Training	
Scan To:	Safety/Training/Equipment/Mar. Hot Tack Sprayer MM/DD/YYYY		
Revision # 001			Page 5 of 5