

# MATERIAL SAFETY DATA SHEET

Date Prepared: 03/24/2006

MSDS No: 033

ThermoFlex Direct Fire Sealant

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## 1. Chemical Product and Company Identification

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Product Identifier: ThermoFlex Direct Fire Joint Sealant  
Manufacturer

**Neyra Industries, Inc.**  
10700 Evendale Drive  
Cincinnati, OH 45241

Emergency Telephone Numbers  
CHEMTREC (800) 424-9300 24 hours  
Emergency Contact Customer Service  
Emergency Phone:  
**1-800-543-7077**

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## 2. Composition/Information on Ingredients

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COMPONENT	CAS#	% BY WT	TLV
Asphalt Cement	8052-42-4	< 55	5 mg/m <sup>3</sup> *
Crumb Rubber		< 20	N/D**
Calcium Carbonate	1317-65-3	< 25	10 mg/m <sup>3</sup> total dust

\* Asphalt (petroleum) Fumes

\*\* N/D = Not Determined

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## 3. Hazards Identification

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### Emergency Overview

Immediate concerns: All persons working with hot bitumen should be familiar with the following procedures in order to administer first aid to burn victims. This document should accompany the patient and be placed in a prominent position before transport to doctor or hospital. The key recommendation is to involve the aid of a physician immediately. **NO ATTEMPT SHOULD BE MADE TO REMOVE THE BITUMEN IN THE FIELD.** This material has not been in long tested in long chronic exposure tests.

### Potential Health Effects

Eyes: Contact with product at elevated temperatures can result in thermal burns.

Skin: Contact with product at elevated temperatures can result in thermal burns.

Ingestion: May cause vomiting. When asphaltic products are heated, they often give off small amounts of hydrogen sulfide, which is an extremely flammable, highly toxic gas.

Inhalation: When asphaltic products are heated, they often give off small amounts of hydrogen sulfide, which is an extremely flammable, highly toxic gas. Inhalation of vapors at elevated temperatures may cause irritation to the nose, throat, and respiratory tract. Move to fresh air.

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#### **4. First Aid Measures**

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**Eyes:** If hot bitumen has entered the eye it should be flushed with water until the bitumen has cooled. No attempt should be made to remove the bitumen by unqualified personnel. The patient should be referred urgently for specialist medical assessment and treatment.

**Skin:** When an accident occurred the affected area should be cooled as quickly as possible to prevent the heat causing further damage. Bitumen has a high specific heat capacity and is also a good insulator. For these reasons the burn should be drenched in cold water for at least five minutes. However, body hypothermia must be avoided. No attempt should be made to remove the bitumen from the burned area.

#### **FURTHER TREATMENT, FIRST AID AND MEDICAL CARE**

The bitumen layer will be firmly attached to the skin and removal should NOT be attempted unless carried out at a medical facility under the supervision of a burns specialist. The cold bitumen will form a waterproof, sterile layer over the burn which will prevent the burn from drying out. If the bitumen is removed from the wound there is the possibility of complications.

Furthermore, by exposing a second degree burn in order to treat it there is the possibility that infection or drying out will make the wound deeper.

#### **SECOND DEGREE BURNS**

The bitumen should be left in place and covered with a Tulle dressing containing paraffin or a burn ointment containing paraffin, e. g. Flamzine ( silver sulphadiazine ). Such treatment will have the effect of softening the bitumen enabling it to be gently removed over a period of days. As a result of the natural re-epithelialisation of the wound any remaining bitumen will peel off in time.

#### **THIRD DEGREE BURNS**

Active removal of the bitumen should be avoided unless primary surgical treatment is being considered due to the location and depth of the wound. In such cases removal of the bitumen is best carried out in the operating theatre between the second and fifth day after the burn occurred. By the second day the capillary circulation has usually removed and the bed of the wound is such that a specialist can assess the depth to which the burn has penetrated. There are normally no secondary problems such as infections to contend with before the sixth day. However, it is essential to commence

treatment using paraffin based substances from the day of the accident to facilitate removal during surgery.

#### CIRCUMFERENTIAL BURNS

Where hot bitumen completely encircles a limb or other body part the burned tissue might swell under the cooled and hardened bitumen causing a tourniquet effect. In the event of this occurring the bitumen should be softened as described above.

Ingestion: Get medical attention immediately.

Inhalation: If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

Antidotes: If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

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### **5. Fire Fighting Measures**

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Comments: Not Established

Flashpoint and Method: 585 degrees F

Comments: Not Established

Autoignition Temperature: None

Comments: None

Hazardous Combustion Products: Not Established

Other Considerations: "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS,

STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE

INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

General Hazard: None

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

Flammable Class: None

Flame Propagation or Burning Rate of Solids: Not yet Determined

Fire Explosion: None

Fire Fighting Procedures: Do not use water on an asphalt fire since it may cause a violent eruption and spread the burning asphalt.

Explosion Hazards: None

Extinguishing Media: Use dry chemical or CO2.

Sensitive Static Discharge: Not Established

Sensitivity to Impact: None

Comments: Not Established

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## **6. Accidental Release Measures**

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**Small Spill:** The asphalt portion is classified as an oil. Spills entering surface waters that cause a sheen must be reported to the national response center at 1.800.424.8802. Contain material and allow to cool. Product is a solid at room temperature. Avoid runoff into storm sewers and ditches which lead to waterways. Absorb spill with suitable material. In soil, recover the spilled material, put in closed containers for disposal. Dispose in a safe manner in accordance with local, state and federal regulations. On water, stop the leak and prevent it from spreading. Notify the proper authorities. Avoid runoff into storm sewers and ditches which lead to waterways. Do not flush to sewer.

**Large Spill:** For large spills, dike the area, allow the material to cool down and place into closed containers. Prevent this material from entering waterways.

**Special Protective Equipment:** Wear protective clothing during cleanup.

**General Procedures:** Keep spectators away from spill. Surface may be slippery, use care to avoid falling.

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## **7. Handling and Storage**

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**Handling:** Wash thoroughly after handling.

**Storage:** Keep away from heat, sparks and flame.

**Loading Temperature:** Not Established

**Storage Temperature:** 0 degrees F to 200 degrees F

**Loading/Unloading Viscosity:** Not Determined

**Storage Pressure:** Not Determined

**General Procedures:** Follow all MSDS/label precautions even after container is emptied because they may retain product residues.

**Electrostatic Accumulation Hazard:** None

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## **8. Exposure Controls/Personal Protection**

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Eyes and Face: Wear safety glasses with side shields (or goggles) and a face shield.

Protective Clothing: This product can cause severe burns. All equipment used in it is application should be well maintained with special emphasis given to all safety features. Only heat outdoors. Long sleeve shirts and pants are recommended while using this product.

Skin: When material is heated, wear gloves to protect against thermal burns.

Respiratory: Use a NIOSH approved respirator.

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## **9. Physical and Chemical Properties**

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Physical State: Solid

Appearance: Shiny with granular appearance.

Color: Black.

Vapor Pressure: None

Melting Point: 180 degrees F

Boiling Point: >900 degrees F

pH: 7.0 to 10.0

Evaporation Rate: None

Density: 9.50 at 77 degrees F

Odor: Asphalt odor

Percent Volatile: 0

Specific Gravity: 1.16

Viscosity: Not Available

Vapor Density: Heavier

Water Solubility: None

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## **10. Stability and Reactivity**

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Stable: Yes

Hazardous Polymer: No

Stability: Stable.

Polymerization: None.

Conditions to Avoid:

Incompatible Materials: Do not allow heated material to contact aqueous materials or highly flammable materials as this can cause violent eruptions due to steam generation or fires.

Hazardous Decomposition: A complex mixture of airborne solids, liquids and gases will evolve when this material undergoes combustion. Stable.

However, may decompose if heated. When the dried material burns, steam,

carbon dioxide, carbon monoxide, and other toxic fumes may be emitted.

Notes: Do not heat above safe heating temperature. Hot asphalt may ignite flammable mixtures.

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**11. Toxicological Information**  
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**12. Ecological Information**  
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Environmental Data: None

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**13. Disposal Considerations**  
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Disposal Method: Dispose of the dried material in a safe manner in accordance with federal, state and local regulations. Do not dispose of by means of sinks, drains or in the immediate environment. Empty drums should be completely drained, properly bunged, and returned to a drum reconditioner. Drill a hole in the bottom of empty pails to prevent drowning of small children.

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**14. Transport Information**  
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**15. Regulatory Information**  
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SARA Title III (Superfund Amendments and Reauthorization Act)  
313 Reportable Ingredients: None

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**16. Other Information**  
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Approval date: 05/25/2006  
Approved by: Greg Houser Title: V. P. Manufacturing  
Reason for Issue: New Format  
Revision Summary: New MSDS  
Information Contact: 1.800.543.7077

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<b>HMIS CODES:</b>	2	2	0	C		<b>NFPA CODES:</b>	2	2	0	-

(Health, Fire, Reactivity, Protection)

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