



Product Name: TUFF-N-DRI
 Chemical Name:
 Chemical Family: Coating
 Product Code: KWS-0043
 MSDS Preparer: R. A. MIKOL

Date Prepared: 12-MAY-03
 Replaces Date: 01-MAY-03

 Section 2 - Molecular Composition

Common Name and Chemical Name Exposure Limits	Weight %	CAS Number
ASPHALT	40.0-70.0	8052-42-4
OSHA:TWA - STEL -		
ACGIH:TWA 0.50 mg/M3 STEL -		(fumes, as benzene extractable inhalable particulates)
WATER	15.0-40.0	7732-18-5
OSHA:TWA - STEL -		
ACGIH:TWA - STEL -		
POLYMER MODIFIER	5.0-25.0	Trade Secret
OSHA:TWA - STEL -		
ACGIH:TWA - STEL -		
STODDARD SOLVENT (MINERAL SPIRITS)	3.0-10.0	8052-41-3
OSHA:TWA 100 ppm STEL -		
ACGIH:TWA 100 ppm STEL -		
HYDROGEN SULFIDE	0.1-1.0	7783-06-4
OSHA:TWA 10 ppm STEL 15 ppm		
ACGIH:TWA 10 ppm STEL 15 ppm		

The listing of ingredient(s) above is in compliance with the Federal Hazard Communication Standard (29 CFR 1910.1200) requirements. De minimus concentrations and ingredients not considered hazardous under the Standard are generally excluded.

 Section 3 - Hazards Identification

 EMERGENCY OVERVIEW:

Brown liquid. Can cause headache, dizziness, nausea, drowsiness, stupor, irritation to respiratory system. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention immediately.

Potential Hlth Effect/Rte of Entry:

- Inhalation:
Can cause headache, dizziness, nausea, drowsiness, stupor, irritation to respiratory system.
- Eyes:
Can cause irritation.
- Ingestion:
Can cause gastrointestinal irritation.
- Skin:
Can cause irritation.
- Aggravated Medical Conditions:
Pre-existing eye, skin, and respiratory disorders may be aggravated by exposure.
- Acute Health Effects:
See effects described above.
- Chronic Health Effects:
Prolonged or repeated skin contact with asphalt in these products may result in irritation and dermatitis. Although a direct association between

asphalt and cancer or other lung disease has not been established in man, asphalts contain variable amounts of polycyclic aromatic hydrocarbons and other volatiles which have been shown to cause cancer and respiratory damage in animals. Prolonged or repeated exposure to mineral spirits (petroleum naphtha or stoddard solvent) may cause the defatting, irritation, dermatitis, narcotic and CNS effects described above, liver effects, and jaundice. Kidney and lung effects have been noted in some animal species.

Section 4 - First Aid Measures

Inhalation:

Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention immediately.

Eyes:

Flush immediately with running water for 15 minutes, lifting the upper and lower lids occasionally. Get medical attention immediately.

Ingestion:

Get medical attention immediately.

Skin:

Clean area of contact thoroughly using soap and water. If irritation, rash or other disorders develop, get medical attention immediately.

Notes to Physician: N/A

Section 5 - Fire Fighting Measures

Flash Point: >212 F
Method: PENSKY-MARTENS CC
Lower Flammability Limit: ND
Upper Flammability Limit: ND
Autoignition Temperature: ND

Extinguishing Media:

If water fog is ineffective, use carbon dioxide, dry chemical or foam.

Fire and Explosion Hazards:

Not Applicable

Special Fire Fighting Procedures:

During a fire, personnel at the scene are to prevent exposure to fumes using accepted fire fighting techniques.

Fire Fighting Equipment: N/A

Other Precautions:

Not Applicable

Section 6 - Accidental Release Measures

Release Response Overview:

Absorb spill in sand, earth or other suitable material. Transfer to appropriate container for disposal.

Section 7 - Handling and Storage

Handling and Storage Precautions:

Store under normal warehouse conditions. Prevent inhalation of vapor, ingestion, and contact with skin and eyes. Keep container closed when not in use. Precautions also apply to emptied containers. Change soiled workclothes frequently. Clean hands thoroughly after handling. Personal protective equipment must be worn during maintenance or repair of contaminated mixer, reactor, or other equipment.

Section 8 - Exposure Controls/Personal Protection

Respiratory:

Wear appropriate, properly fitted NIOSH/MSHA approved respirator, as directed by the manufacturer, when the airborne contaminant level(s) exceed the exposure limits indicated in Section 2 of the MSDS.

Skin:

Protect hands with impervious rubber gloves and wear typical full cover clothing. Prevent contact with skin.

Eyes:
Chemical splash goggles.
Face:
Face shield is recommended.
Engineering:
Use local exhaust when the general ventilation is not sufficient to keep the airborne contaminant concentration below the exposure limit in Section 2 of the MSDS.

Section 9 - Physical and Chemical Properties

Odor/Appearance: SLIGHT AMMONIA/BROWN
Color: BROWN
Physical State: LIQUID
pH: 8-12
Vapor Pressure: ND
Vapor Density: ND
Boiling Point: SAME AS WATER
Melting Point: ND
Freezing Point: APPROX. 30 F
Solubility in Water: DISPERSIBLE
Specific Gravity: 1.0
% Volatile Weight: 40.4

Section 10 - Reactivity/Stability

Stability:
Stable
Incompatible Products:
Avoid contact with strong oxidizing and reducing agents.
Conditions to Avoid Polymerization:
Hazardous polymerization will not occur.

Section 11 - Toxicological Information

Eyes: See Section 3
Ingestion: " " "
Inhalation: " " "
Skin: " " "
Subchronic: " " "
Chronic: " " "

Section 12 - Ecological Information

Ecotoxicological Data: N/A
Chemical Fate: N/A

Section 13 - Disposal Considerations

RCRA Class: N/A
Disposal Method:
Not regulated by RCRA. Dispose of in compliance with state and local regulations.

EPA Reportable Quantities

N/A

Section 14 - Transportation Data

DOT Shipping Name: NOT REGULATED
DOT Hazard Class: NOT APPLICABLE
DOT Label:
UN/NA Number: N/A
Packing Group:

Special Provisions:
Packaging

Exceptions:
Non-Bulk:
Bulk:

Quantity Limitations

Passenger Aircraft or Railcar:
Cargo Aircraft:
Vessel Stowage Requirements

Vessel Stowage:
Other Stowage:

Transportation Notes: N/A

Section 15 - Regulatory Information

TSCA Status: On the TSCA Inventory
OSHA Status: Considered hazardous based on the following criteria:
Irritant

Target Organs

Lung
Skin
Eye

OSHA Hazardous Components	CAS Number
-----	-----
HYDROGEN SULFIDE	7783-06-4
SODIUM HYDROXIDE	1310-73-2
* ASPHALT	8052-42-4
STODDARD SOLVENT (MINERAL SPIRITS)	8052-41-3

* - CHEMICAL IS LISTED AS AN IARC, NTP, OSHA, or ACGIH CARCINOGEN

Compliance Quantities

N/A

SARA 311 Ratings

Immediate Health Hazard: Y
Delayed Health Hazard: Y
Fire Hazard: N
Reactivity Hazard: N
Sudden Release of Pressure Hazard: N

SARA 313 Ingredients	CAS Number
-----	-----
HYDROGEN SULFIDE	7783-06-4

Proposition 65 Ingredients

Chemicals known to the State of California to cause cancer,
birth defects and/or other reproductive harm.

CAS Number

ASPHALT 8052-42-4

Section 16 - Other Information

FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.
THE HAZARD INFORMATION HEREIN IS OFFERED SOLELY FOR THE CONSIDERATION
OF THE USER, SUBJECT TO HIS OWN INVESTIGATION OF COMPLIANCE WITH APPLICABLE
REGULATIONS, INCLUDING THE SAFE USE OF THE PRODUCT UNDER EVERY FORESEEABLE
CONDITION.