MATERIAL SAFETY DATA SHEET



PRODUCT NAME: Mule-Hide 311 Non-Fibrated Emulsion Roof CoatingMSDS 10-8565

= SECTION I - MANUFACTURER IDENTIFICATION =

Manufacturer: Tropical Roofing Products

1904 S.W. 31st Ave. Hallandale Beach, FL 33009 Phone: (800) 432-2855 **Supplier: Mule-Hide Products Co., Inc.**

1195 Prince Hall Drive Beloit, WI 53511 Phone: (800) 786-1492

FLORIDA PLANT	CALIFORNIA PLANT	TEXAS PLANT	NEW JERSEY PLANT	
Address: 1904 S.W. 31ST Ave. Hallandale, FL 33009	Address: 14435 Macaw Street La Mirada, California 90638	Address: 1225 Brai Drive P.O. Box 5335 Port Arthur, Texas 77640	Address: 237 N. Grove ST. Williamstown Junction, NJ 08009	
E-mail: info- fl@tropicalroofingproducts.com	E-mail: info- ca@tropicalroofingproducts.com	E-mail: info- tx@tropicalroofingproducts.com	E-mail: james@unitedasphalt.com	
Information Phone #: (800) 432-2855	Information Phone #: (877) 827-2622	Information Phone #: (866) 727-0091	Information Phone#: (800) 843-0317	
Emergency Phone #: (800) 424-9300	Emergency Phone #: (800) 424-9300	Emergency Phone #: (800) 424-9300	Emergency Phone #: (800) 424-9300	

DATE PREPARED: June 21, 2012 **PRIMARY CONTACT:** Technical Services

DATE REVISED: October 15, 2012 E-MAIL FOR ABOVE: technical@tropicalroofingproducts.com

===== SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION ===

	OCCUPATIONAL EXPOSURE LIMITS			VAPOR PRESSURE		
HAZARDOUS COMPONENTS	CAS NUMBER	R OSHA PEL	ACGIH TLV	OTHER	mm Hg @ 7	ГЕМР
PETROLEUM ASPHALT/BASE ASPHALT	8052-42-4	N/E	5MG/M3	5MG/M3	3.0	68F
HYDROUS ALUMINUM SILICATE/KAOLIN	1332-58-7	5MG/M3	2MG/M3		N/A	
WATER/WATER	7732-18-5	N/A	N/A	N/A	17.5	68F
HYDROGEN CHLORIDE	7647-01-0	7MG/M3	3MG/M3		190.0	77F
SUFURIC ACID	7664-93-9	1MG/M3	0.2MG/M3		1.0	295F
HYDROGEN PEROXIDE	7722-84-1	1PPM	1PPM		25.0	86F
MANGANESE SULFATE	7785-87-7	5MG/M3	0.2MG/M3		N/E	

There are no S.A.R.A. Section 313 ingredients in this material in excess of de minimis amounts. Petroleum asphalt may contain detectable amounts of chemicals known to the State of California to cause cancer or reproductive harm.

Generally, the above ingredients that do not possess a vapor pressure are pigments and are only hazardous as airborne particles when the coating begins to degrade.

The HMIS (Hazardous Materials Identification System) codes at the upper right area of this page are recognized by OSHA. The PERSONAL PROTECTION code is left blank on Tropical Roofing Products MSDSs as it depends on application technique and workplace ventilation. Please read all other sections of this MSDS before deciding on the appropriate protective equipment and beginning work.

== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS =

BOILING POINT: 212 Deg F SPECIFIC GRAVITY (H2O=1): 1.1

VAPOR DENSITY: HEAVIER THAN AIREVAPORATION RATE: SLOWER THAN ETHERCOATING V.O.C.:0.07 LB/GL(8 GR/LT)MATERIAL V.O.C.:0.02 LB/GL(3 GR/LT)

SOLUBILITY IN WATER: Soluble APPEARANCE AND ODOR: Dark brown colored liquid with slight odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: None METHOD USED: N/A

FLAMMABLE LIMITS IN AIR BY VOLUME - LOWER: N/A UPPER: N/A

EXTINGUISHING MEDIA: FOAM, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIRE FIGHTING PROCEDURES

Polymer film can burn. Avoid breathing fumes of burning dry coating because carbon dioxide/monoxide may be released. Use full protective equipment including self-contained breathing apparatus. Cool closed containers with water.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Closed containers may explode when exposed to extreme heat or fire. Material may splatter if exposed to extreme heat. Decomposition of burning material may cause toxic gases to form, which may include carbon dioxide and carbon monoxide.

===== SECTION V - REACTIVITY DATA ====

STABILITY: STABLE

CONDITIONS TO AVOID

Elevated temperatures and build up of vapors. Heat, sparks and open flame. Avoid free fall.

INCOMPATIBILITY (MATERIALS TO AVOID)

Oxidizers, acids and bases.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

Burning or decomposing film may give off carbon dioxide and or carbon monoxide.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

= SECTION VI - HEALTH HAZARD DATA =

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Lightheadedness, staggered gait, headache, dizziness and nausea. Irritation to the nose, throat and lungs.

Prolonged inhalation may lead to mucous membrane irritation, central nervous system depression, and unconsciousness.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Irritation and watering of the eyes.

Prolonged or repeated contact can cause blurred vision and corneal injury.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Irritation of skin, redness and possible swelling.

Prolonged or repeated contact can cause dermatitis, defatting. Can be absorbed through skin.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Amounts ingested incidental to consumer and industrial handling are not likely to cause injury.

Ingestion of large amounts can cause serious injury, including gastrointestinal irritation, nausea, and vomiting.

HEALTH HAZARDS (ACUTE AND CHRONIC)

Breathing difficulty, headache, dizziness, nausea and irritation to the respiratory tract. Causes eye and skin irritation.

Irritation of the digestive tract and nervous system depression.

Prolonged and repeated overexposure may cause permanent brain and or nervous system damage. Can cause dermatitis.

Sanding dust inhalation may cause lung damage. Intentional misuse through inhalation may be harmful or fatal.

CARCINOGENICITY: NTP? NO IARC MONOGRAPHS? NO OSHA REGULATED? NO

If this product contains ethylene glycol (see section II), oral consumption may produce adverse health effects e.g. kidney damage.

This product may contain trace amounts of crystalline silica, which is considered a hazard by inhalation that can cause silicosis.

Petroleum asphalt may contain detectable amounts of chemicals known to the State of California to cause cancer or reproductive harm.

===== SECTION VI - HEALTH HAZARD DATA (CONTINUED) ==

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Ingredients in this product are reported to aggravate preexisting eye, skin, respiratory, kidney and liver disorders.

EMERGENCY AND FIRST AID PROCEDURES

Eye contact: Flush with large quantities of water for at least 15 minutes. Seek immediate medical attention.

Inhalation: Remove to fresh air. Administer oxygen if necessary. Seek immediate medical attention.

Skin contact: Wash thoroughly with soap and water. If irritation persists, get medical attention.

Ingestion: Do not induce vomiting. Drink 1 or 2 glasses of water to dilute. Obtain medical attention immediately.

===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE ===

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Avoid contact and breathing of vapors. Ventilate area. Remove ignition sources. Dike and absorb with absorbent material. Prevent material from entering sewers or open bodies of water.

WASTE DISPOSAL METHOD

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

Incinerate in an approved facility. Do not incinerate closed containers. Do not drop or throw containers.

Dispose of in accordance with Federal, State and Local regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep out of reach of children. Do not take internally. Avoid contact with eyes and prolonged contact with skin.

When storing containers, close tightly, keep in upright position, away from fire, open flame and high temperature areas.

Transfer only to approved containers with complete and appropriate labeling.

Remove contaminated clothing and launder before reuse. Remove contaminated shoes and thoroughly dry before reuse. Wash skin thoroughly with soap and water after contact.

OTHER PRECAUTIONS

Warning! If you scrape, sand or remove an old coating, you may release lead dust. Lead is toxic. Exposure to lead dust can cause serious illness, such as brain damage, especially in children. Pregnant women should also avoid exposure. Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log onto www.epa.gov/lead.

= SECTION VIII - CONTROL MEASURES =

RESPIRATORY PROTECTION

Use only with adequate ventilation. Provide adequate fresh air entry. If not wear the proper respiratory protection.

If ventilation is inadequate use an organic vapor/particulate respirator approved by NIOSH/MSHA for spray/mist vapors.

When sanding a dried coating film use a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated.

VENTILATION

Local exhaust preferable.

If in confined areas, use mechanical ventilation to keep vapor concentration under permissible TLV and LEL.

PROTECTIVE GLOVES

Waterproof rubber gloves are required during repeated contact.

EYE PROTECTION

Splash resistant and spray mist protection required. Use splash goggles or safety glasses with side shields.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Clothing adequate to protect skin. Remove and wash before reuse.

Eye wash, safety shower.

WORK/HYGIENIC PRACTICES

Normal industrial hygienic practices should be followed. Wash hands before eating, smoking or using the washroom.

==== SECTION IX - TRANSPORTATION DATA ===

DOT

Non-Bulk Not Regulated (Water based material Non-bulk - PROTECT FROM FREEZING!)

Bulk Not Regulated (Water based material Bulk - PROTECT FROM FREEZING!)

Note N/A

IMDG

Not Regulated

IATA

Not Regulated

= SECTION X - STATE ADDENDUM ==

<u>Ingredient</u>	CAS Number	<u>Notes</u>
PETROLEUM ASPHALT	8052-42-4	A Massachusetts Hazardous Substance List material
PETROLEUM ASPHALT	8052-42-4	A Minnesota Hazardous Substance List material
PETROLEUM ASPHALT	8052-42-4	A Pennsylvania Hazardous Substance List material
PETROLEUM ASPHALT	8052-42-4	A Washington State Permissible Exposure for Air Contaminants material
PETROLEUM ASPHALT	8052-42-4	A Florida Toxic Substance List material
PETROLEUM ASPHALT	8052-42-4	Petroleum asphalt may contain detectable amounts of chemicals known to the State of California to cause cancer or reproductive harm.
KAOLIN	1332-58-7	A Minnesota Hazardous Substance List material
KAOLIN	1332-58-7	A Pennsylvania Hazardous Substance List material
WATER	7732-18-5	See current Material Safety Data Sheet

All information contained in this MSDS is based on current technical data believed to be accurate and reliable. Additions of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since these conditions are outside our control, we furnish this MSDS without any express or implied warranties.