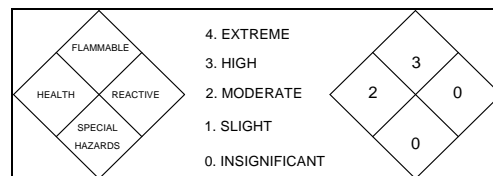


MATERIAL SAFETY DATA SHEET
ROOFING PRODUCTS INTERNATIONAL, INC.
MSDS 313 ROYAL EDGE TPO HW MEMBRANE CLEANER



SECTION 1 – PRODUCT IDENTIFICATION

Product Name: Royal Edge TPO HW Membrane Cleaner		24 Hour Emergency Telephone Number: 800-424-9300 CHEMTREC
Chemical Name/Synonyms: N/A	Product Code: TMC	Manufacturer's Name: Roofing Products International, Inc.
Chemical Family: Mixture		Manufacturer's Address: 57460 Dewitt St., Elkhart, IN 46517-1078
Chemical Formula: N/A		NFPA Acute Hazard Rating: Health 2, Flammability 3, Reactivity 0 HMIS Acute Hazard Rating: Health 0, Flammability 0, Reactivity 0

SECTION 2 – CHEMICAL COMPOSITION

Ingredient Components (chemical names) Hazardous Components 1% or greater; Carcinogens 0.1% or greater:	% wt or %vol	Case No.	OSHA PEL ACGIH	ACGIH TLV
Toluene	0-1%	108-88-3	100 ppm STEL 150 ppm	50 ppm STEL 150 ppm
Xylene	79-82%	1330-20-7	750 ppm STEL 1000 ppm	50 ppm STEL 750 ppm
Ethylbenzene	18-20%	100-41-4	300 ppm STEL 400 ppm	300 ppm
Total	100			

SECTION 3 – PHYSICAL & CHEMICAL CHARACTERISTICS

Appearance/Odor: Clear colorless liquid with solvent odor.	Physical State: Liquid	Solubility in Water: < 0.08%
Boiling Point: 279°F @ 760 mmHg	Specific Gravity (HO=1) .870 @ 60°F	Melting Point: N/A
Vapor Pressure: 5.1 mmHg @ 68°F	Vapor Density (Air=1) 3.66	Freezing Point: N/A
Percent Volatiles: 0.7% maximum	Evaporation Rate: .86	Reactivity in Water: None
pH (Full Strength) N/A	pH (Recommended Dilution): N/A	Refraction Index: N/A

SECTION 4- FIRE & EXPLOSION HAZARD DATA

Flash Point: 80°F	Flammable Limits (in air): LEL: 1.0% UEL: 6.6%
Extinguishing Media: Dry chemical, regular foam, and Carbon Dioxide can be used.	Fire Fighting Procedures: Limit fire fighting to those trained to do so. Firefighters should wear full protective clothing including self-contained breathing apparatus to prevent inhalation of smoke and decomposition products. Toxic fumes and vapors may be involved.
Hazardous Decomposition Products: In the event of combustion, carbon dioxide, smoke, carbon compound and other decomposition products may be released.	Special Fire & Explosion Hazards: Material is highly volatile and gives off vapors which may travel along the ground or be moved by ventilation and ignited by static sparks, pilot lights, electric motors, welders, heaters, or other sources of ignition at far from the application point. Welding or cutting on or near empty containers may result in vapor ignition and explosions.
Method Used: Estimate based on flash point of most volatile component.	Auto-Ignition Temperature: 980°F

SECTION- 5 HEALTH HAZARD DATA

Primary Routes of Entry: Inhalation <u>X</u> Skin Absorption <u>X</u> Ingestion <u>X</u> None <u> </u>	Signs and Symptoms of Exposure: Under normal conditions of use, this product will not release or otherwise result in exposure to hazardous chemicals.
Effects of Overexposure: Toxic fumes may be released during fire. Exposure to fumes may aggravate pre-existing eye, lung, and skin conditions.	
Acute: Inhalation: Breathing large amounts of vapor or mist may be harmful. Symptoms usually occur at air concentration higher than the recommended exposure limits. Ingestion: Swallowing this material may be harmful. Material may get into the lungs during swallowing or vomiting causing lung inflammation and injury. Eyes: May cause eye irritation. Symptoms include stinging, tearing, and redness. Skin: Can cause skin irritation. Prolonged or repeated contact can dry the skin. Symptoms include drying and cracking, burns, and other skin damage. Although unlikely during safe handling and use, material can be absorbed thru the skin.	Chronic: Overexposure to this material (or its components), has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, and mild reversible kidney effects with kidney damage and cardiac sensitization. This material (or a component) has been shown to cause defects in laboratory animal studies. The relevance to humans is uncertain. This material has not caused cancer in laboratory animals. Ethylbenzene has been shown to cause cancer in laboratory animals but the relevance of this finding to humans is unclear. IARC (International Agency for Research on Cancer) has classified ethylbenzene as a possible human carcinogen. Benzene: Know to the state of California to cause cancer. Benzene and Toluene: Known to the state of California to cause reproductive harm.
Carcinogen Listed In: NTP <u> </u> IARC Monograph <u> </u> OSHA <u> </u> Not Listed <u>X</u>	

Emergency & First Aid Procedures:

Eye Contact: Move individual away from exposure and into fresh air. Flush eyes gently with clean water for at least 15 minutes while holding eyelids apart. If symptoms persist, seek medical attention.

Skin Contact: Remove contaminated clothing. Flush exposed area with large amounts of clean water. If skin is damaged, seek medical attention. If symptoms persist, seek medical attention. Launder or properly dispose of contaminated clothing.

Inhalation: If symptoms develop, immediately move the individual away from exposure into fresh air. Seek immediate medical attention. If breathing is difficult, administer oxygen. If the person is not breathing, begin artificial respiration.

Ingestion: Seek medical attention. If individual is drowsy or unconscious, place the individual on the left side with the head down.

Do not give anything by mouth. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. Do not leave the individual un-attended.

Note to Physicians:

Inhalation of high concentrations of this material, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity. (See section on Ingestion) when deciding whether to induce vomiting. Pre-existing disorders of the following organs, (or organ systems) may be aggravated by exposure to this material: skin, lung (asthma-like conditions), liver, kidney, and auditory system. Individuals with pre-existing heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

SECTION 6 – REACTIVITY DATA

Stability: Stable	Incompatibility: Strong oxidizing agents.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, and various hydrocarbons.	Hazardous Polymerization: Will not occur
Conditions to Avoid: Fires, sparks, static electricity, and confined areas without ventilation.	

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled: Small spill: Eliminate all sources of ignition such as flares, electrical sparks, flames, and pilot lights. Absorb liquid on vermiculite, floor absorbent, or other absorbent material and transfer to proper collection containers.
Large Spill: Stop spill at source. Eliminate all sources of flames, electrical sparks, and pilot lights. Persons not wearing protective equipment should be excluded from the spill and clean-up area until clean-up is complete. Prevent materials from entering drains, sewers, streams or other bodies of water. Prevent the spreading of spilled material. Using proper equipment, transfer spilled material to clean recovery containers. Absorb unrecoverable product and transfer the contaminated absorbent soil, debris, and other materials to containers for disposal. Promptly notify the proper authorities that a spill has occurred.
Waste Disposal Method: Destroy by liquid incineration in accordance with applicable local, state, and federal regulations.

SECTION 8 – SPECIAL PROTECTION

Respiratory Protection: If vapors exceed TLV, use self contained organic mask MSHA/NIOSH approved.	Eye Protection: Safety glasses with side shields are recommended.
Protective Gloves: Chemical resistant gloves.	Other Protective Equipment: None required under normal installation conditions.
Ventilation: Local Exhaust <u> X </u> Sufficient to keep vapors below TLV or PEL Mechanical (General) to maintain exposure below TLV <u> X </u>	

SECTION 9 – SPECIAL PRECAUTIONS OR OTHER COMMENTS

Storage/Handling:

Store in cool, dry, well ventilated facility. Containers of this material may be hazardous when emptied. Emptied containers retain product residues (vapor, liquid, and/or solids). All hazard precautions given in the data sheet must be observed. All five gallon pails including larger containers such as tanker trucks, tank cars, must be properly grounded against static electricity. Hydrocarbon solvents are non-conductors of electricity and can become electrostatically charged during mixing, filtering or pumping at high flow rates. If the charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids.

Warning: Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature or pressure, or sudden ingress of air into vacuum equipment may result in explosions or ignitions without the presence of obvious ignition sources.

Other Precautions:

Store material in cool dry areas in original shipping packaging.

SECTION 10 – TRANSPORTATION

Regulatory Agency:

Not Regulated. All components are included in the EPA Toxic Substance Control Act (TSCA) Chemical Substance Inventory

Identification Number:

Not Applicable

Proper Shipping Name:

Not Applicable

Labels Required:

Not Applicable

Hazard Classification:

**EPA SARA Title III hazard class (40CFR370): None
EPA SARA Title III Section 313 (40CFR372): None
EPA SARA Title III (40CFR355): There are no components present in this product at a level which would require reporting.**

Other Requirements:

Not Applicable

SECTION 11 – MISCELLANEOUS INFORMATION

Additional Comments:

None

Date of Previous MSDS:

October 10, 2006

Changes Since Previous MSDS:

**Comment change in sections: 1 thru 9
Add sections: 10,11**

Telephone Number for Additional Information:

(574) 293-9096

DISCLAIMER

The information contained herein is based on data considered accurate which has been obtained from other companies and organizations. However, no warranty or representation is expressed or implied that the information is accurate, complete, or representative. Roofing Products International, Inc. assumes no responsibility for injury to the buyer, the buyer's employees, or any third persons if reasonable safety procedures are not followed.