

MATERIAL SAFETY DATA SHEET

TKO Waterproof Coatings, LLP
815.338.2006

427 E. Judd Street
Woodstock, IL 60098

1. Metal 1-kote

Approval Date: October 26, 2005

2. PRODUCT COMPOSITION

Product Classification: Agricultural oil-based roof coating

Ingredient Name	CAS Number	Percent
Mineral Spirits	8032-32-4	20% maximum

3. HAZARD IDENTIFICATION

Primary Routes of Exposure:	Effects of Overexposure:
<i>Inhalation</i>	Exposure to high concentrations (> 500 ppm) may cause respiratory irritation. Contact a physician immediately.
<i>Eye Contact</i>	May cause irritation or mechanical abrasion with prolonged exposure.
<i>Skin Contact</i>	Prolonged exposure may cause a skin sensitization reaction in susceptible individuals.
<i>Ingestion</i>	Ingestion should be avoided.

4. FIRST AID MEASURES

Eyes:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
Skin:	In case of contact, immediately flush skin with soap and plenty of water.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion:	If swallowed, get medical attention immediately. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Flash Point: 147 ° F	Method: ASTM D-92, COC
Flammability Limits in Air (% by Vol.):	Lower: Not established Upper: Not established
Auto-ignition Temperature: 446 ° F	
EXTINGUISHING MEDIA/FIRE FIGHTING PROCEDURES	
Extinguishing Media for Fires: Carbon dioxide, dry powder, foam, water fog or mist. Water may be ineffective on flames, but should be used to keep fire exposed containers cool.	
Special Fire Fighting Procedures: Avoid use of water other than light fog or mist.	
Personal Protective Equipment: Fire fighters need self contained respiratory equipment for fires in enclosed areas.	
HMIS Rating: Health:1 Flammability: 1 Physical Hazard: 0 *HMIS: Minimal = 0, Slight = 1, Moderate = 2, Serious = 3 Severe = 4	

6. ACCIDENTAL RELEASE MEASURE

RELEASE RESPONSE

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Contain, collect and reuse, if possible, all product. This product is not considered a hazardous product, and therefore it is not considered a hazardous waste, but should be disposed of in accordance with all local, state and federal environmental regulations and laws. Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Approved NIOSH/MSHA (Organic Vapor) respirator may be necessary under certain conditions where airborne contaminants may exceed exposure limits.

Eye Protection: Wear goggles or safety glasses with side shields at all times.

Other Protective Equipment: Impervious gloves, long sleeve pants and shirts, and protective head wear should be worn to minimize exposure.

7. HANDLING AND STORAGE

HANDLING

Warning - Static charges generated by mist or vapors in or near flammable vapors may cause a flash fire. Avoid ignition sources such as sparks and flame. Ground all equipment. Adequate ventilation should be provided to minimize vapor concentrations. This material should be stored in DOT certified containers only.

STORAGE

The maximum recommended storage temperature for this product is 120° F/49° C. Store in a well ventilated area.

8. EXPOSURE CONTROL INFORMATION

OCCUPATIONAL EXPOSURE LIMITS

Ingredient	OSHA PEL (TWA)	ACGIH TLV (TWA)
Mineral Spirits	500 ppm	100 ppm

TLV: Not established **OSHA PEL:** Not established **LD₆₀:** Not established

Carcinogen or Potential Carcinogen: **NTP:** not listed **IARC:** not listed **OSHA:** not listed

PERSONAL PROTECTION EQUIPMENT

Respiratory Information: A respiratory protection program meeting OSHA 29 CFR & 1910.134 and ANSI Z88.2 requirements must be followed whenever work place conditions warrant a respirator's use. None is required if airborne concentrations are maintained below the TLV/TWA's listed in the "Exposure Limit Information."

Eye Protection: Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent). Eye protection worn must be compatible with respiratory protection system employed.

Hand Protection: NOTE: Material may be a skin sensitizer in susceptible individuals. The gloves listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection:

- Butyl Rubber
- Nitrile

Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves after use. Wash hands with soap and water.

Other Protection: Use a chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact.

ENGINEERING CONTROL MEASURES

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Use local exhaust ventilation with a minimum capture velocity of 150 ft./min. (0.75 m/sec.) at the point of dust or mist evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Government Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

OTHER CONTROL MEASURES

Facilities storing or utilizing this product should be equipped with an eyewash facility and safety showers.

9. PROPERTIES

Physical State:	High viscosity liquid	Appearance/Odor:	Liquid with mild aromatic odor
Boiling Point (° F):	300 to 419 ° F	Freezing/Melting Point:	N.A.
Water Solubility:	Nil	Specific Gravity:	1.3 (H ₂ O = 1)
Vapor Pressure:	0.22 mm Hg at 68 ° F	Viscosity:	40,000 cps at 70 ° F
Vapor Density:	4.9 (air = 1)	Evaporation Rate:	0.16 (n-butyl acetate = 1)

10. REACTIVITY INFORMATION

Stability:	This product is considered stable. Hazardous polymerization will not occur.
Conditions to Avoid:	Very high temperature and open flame.
Materials to Avoid:	Avoid mixing with strong oxidants.
Hazardous Decomposition Products:	CO ₂ , fumes, dense smoke and aldehydes with incomplete combustion.
Hazardous Polymerization Products:	None known.
Hazardous Combustion Products:	Carbon dioxide, carbon monoxide, oxides of nitrogen and smoke.

11. TOXICITY INFORMATION

Acute Data:	None available
Sensitization Data:	None available
Biodegradation Data:	None available

ENVIRONMENTAL / DISPOSAL CONSIDERATIONS

12. ENVIRONMENTAL HAZARDS

None known

13. DISPOSAL CONSIDERATIONS

Contain, collect and reuse, if possible all product. This product is not considered a hazardous product, and therefore is not considered a hazardous waste, but should be disposed of in accordance with all local, state and federal environmental regulations and laws. Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

14. TRANSPORTATION

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Shipping Name: Combustible liquid n.o.s.		Label: N.A.
Hazard Class: N.A.	Packing Group: N.A.	UN#: 1993

15. REGULATORY INFORMATION

<p>Superfund Amendments and Reauthorization Act (SARA Title III): SARA Title III requires planning based on Threshold Planning Quantities (TPQ's) and release reporting based on Reportable Quantities (RQ's) under 40 CFR & 355 (SARA 302, 304, 311 and 312).</p> <p style="text-align: center;">TPQ: Not applicable RQ: Not applicable</p>								
<p>Section 312 and 313: This product contains no toxic chemicals subject to reporting requirements.</p>								
<p>Comprehensive Environmental Response: Compensation and Liability Act (CERCLA) Components present in this product meeting reporting requirements:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; border-bottom: 1px solid black;">Substance</th> <th style="text-align: center; border-bottom: 1px solid black;">CAS Number</th> <th style="text-align: center; border-bottom: 1px solid black;">Concentration</th> <th style="text-align: center; border-bottom: 1px solid black;">RQ</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">None</td> <td style="text-align: center;">None</td> <td style="text-align: center;">None</td> <td style="text-align: center;">None</td> </tr> </tbody> </table>	Substance	CAS Number	Concentration	RQ	None	None	None	None
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None	None	None	None					
<p>OSHA Hazard Communication Standard: This product is subject to inclusion in a Hazard Communication Program containing labeling requirements, Material Safety Data Sheets, and other types of warnings.</p>								
<p>Toxic Substances Control Act (TSCA): All ingredients of this product are listed on the TSCA inventory.</p>								
<p>Resource Conservation and Recovery Act: Listed Hazardous Waste: No Characteristic Hazardous Waste: No</p>								
<p>State Right to Know Acts (MA, NJ, PA): Components subject to reporting are listed in Section 2, Ingredients and Hazards.</p>								
<p>California, Proposition 65: There are no known risks associated with this substance under conditions of normal use.</p>								
<p>Clean Air Act, Ozone Depleting Chemicals: This product contains no Class I or Class II Ozone Depleting Chemicals as defined in 40 CFR 82, Subpart E.</p>								
<p>Canadian Environmental Protection Act (CEPA): This product is listed in the domestic Substance List. Workplace Hazardous Materials Information System (WHMIS): This product is not a controlled substance as defined by the Canadian WHMIS system.</p>								
<p>European Inventory of Existing Chemical Substances (EINICS): This product is listed in the European Inventory of Existing Chemical Substances.</p>								
<p>Australian Inventory of Chemical Substances (AICS): This product is not listed in the Australian Inventory of Chemical Substances.</p>								

16. OTHER INFORMATION

Abbreviations			
OSHA:	Occupational Safety and Health Administration	TLV:	Threshold Limit Value
TWA:	Time Weighted Average	PEL:	Permissible Exposure Limit
NTP:	National Toxicology Program	IARC:	International Agency for Research on Cancer
ANSI:	American National Standards Institute		